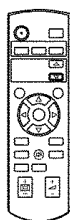


# Service Manual

## LCD Projector



**PT-LB80NTU**  
**PT-LB80NTE**  
**PT-LB80NTEA**  
**PT-LB80U**  
**PT-LB80E**  
**PT-LB80EA**  
**PT-LB75NTU**  
**PT-LB75NTE**  
**PT-LB75NTEA**  
**PT-LB75U**  
**PT-LB75E**  
**PT-LB75EA**

The service technician is required to read and follow the "Safety Precautions" and "Important Safety Notice" in this service manual.

## Specifications

**Power supply:** 100 V - 240 V AC, 50 Hz / 60 Hz

### Power consumption:

300 W [During standby (when fan is stopped):  
Approx. 4 W]

**Amps:** 3.5 A - 1.2 A

### LCD panel:

Panel size (diagonal): 0.63 type (16.00 mm)  
Aspect ratio: 4:3  
Display method: 3 transparent LCD panels (RGB)  
Drive method: Active matrix method  
Pixels: 786 432 (1 024 × 768) × 3 panels

### Lens:

Manual zoom (1.2x) / Manual focus  
F 1.6 - 1.9, f 18.8 mm - 22.6 mm (PT-LB80NT\*\*, PT-LB80\*\*)  
F 1.7 - 1.9, f 18.5 mm - 22.2 mm (PT-LB75NT\*\*, PT-LB75\*\*)

**Lamp:** UHM lamp (220 W)

**Luminosity:** 3 200 lm (PT-LB80NT\*\*, PT-LB80\*\*)  
2 600 lm (PT-LB75NT\*\*, PT-LB75\*\*)

### Operating environment:

Temperature: 0° C - 40° C  
(when the ALTITUDE is set to "HIGH" : 0° C - 35° C)  
Humidity: 20 % - 80 % (no condensation)

### Scanning frequency (for RGB signals):

Horizontal scanning frequency: 15 kHz - 91 kHz  
Vertical scanning frequency: 50 Hz - 85 Hz  
Dot clock frequency: 110 MHz or less

### COMPONENT (YPbPr) signals:

525i (480i), 525p (480p), 625i (576i), 625p (576p),  
750 (720)/50p, 750 (720)/60p 1 125 (1 080)/50i,  
1 125 (1 080)/60i

### Color system:

7 (NTSC / NTSC 4.43 / PAL / PAL-M / PAL-N / PAL60 / SECAM)

**Projection size:** 838.2 mm - 7 620 mm

**Throw distance:** 1.1 m - 11.6 m

**Screen aspect ratio:** 4:3

### Installation (Menu selection method):

FRONT/DESK, FRONT/CEILING, REAR/DESK,  
REAR/CEILING (Menu selection method)

**Speakers:** 1piece 4 cm × 2 cm

**Max. usable volume output:** 1.0 W

### Terminals:

**S-VIDEO IN:** Single-line, Mini DIN 4p

Y: 1.0 V [p-p], C: 0.286 V [p-p], 75 Ω

**VIDEO IN:** Single-line, RCA pin jack

1.0 V [p-p], 75 Ω

**COMPUTER:** Single-line, D-sub HD 15-pin (female)

RGB input/output

RGB: 0.7 V [p-p], 75 Ω

G SYNC: 1.0 V [p-p], 75 Ω

YPbPr/YCbCr input/output

Y: 1.0 V [p-p] (Including sync), 75 Ω

Pb/Cb, (Pr/Cr): 0.7 V [p-p], 75 Ω

HD, VD/SYNC: TTL high impedance, automatic  
positive/negative polarity compatible

### AUDIO IN:

Single-Line, RCA pin jack × 2 (L-R)  
0.5 V [rms]

### COMPUTER AUDIO IN:

Single-Line, M3 jack (Stereo MINI)  
0.5 V [rms]

### VARIABLE AUDIO OUT:

Single-Line, M3 jack (Stereo MINI)  
(Monitor output/stereo compatible)  
0 V [rms]-2.0 V [rms] (variable)

**SERIAL:** D-sub 9-pin RS-232C compatible

**Wireless LAN** (PT-LB80NT\*\*/LB75NT\*\* only):

**Compatible:** IEEE802.11b/IEEE802.11g  
(Wireless LAN standard protocol)

### Wireless channel:

PT-LB80NTU:

IEEE802.11b/IEEE802.11g: 1-11 channels

PT-LB80NTE/EA:

IEEE802.11b/IEEE802.11g: 1-13 channels

**Distance:** 30 m Depends on the usage environment

**Cabinet:** Molded plastic (PC+ABS)

### Dimensions:

Width: 368 mm

Height: 88 mm

Length: 233 mm (not including surface projection parts)

**Weight:** 2.96 kg

### Certifications:

PT-LB80NTU/LB80U, PT-LB75NTU/LB75U:  
UL60950-1, C-UL, FCC Class B,  
ICES-003 Class B

PT-LB80NTE/EA, PT-LB80E/EA, PT-LB75NTE/EA,  
PT-LB75UE/EA:

EN60950-1, EN55022, EN61000-3-2,  
EN61000-3-3, EN55024

### < Remote control unit >

#### Power supply:

3 V DC (AA battery × 2)

#### Operating range:

Approx. 15 m

(when operated directly in front of signal receptor)

#### Dimensions:

Width: 48 mm

Height: 24.5 mm

(not including surface projection parts)

Length: 163 mm

**Weight:** 117 g (including batteries)

### Accessories:

#### Remote control unit

PT-LB80NT\*\*/LB75NT\*\* (N2QAYB000260): 1

PT-LB80\*\*/LB75\*\* (N2QAYB000262): 1

**AA batteries for remote control unit (x2) :** 1

#### Power cord:

PT-LB80NTU/LB80U, PT-LB75NTU/LB75U:  
K2CG3DR00007 1

PT-LB80NTE/EA, PT-LB80E/EA, PT-LB75NTE/EA,  
PT-LB75E/EA:

K2CM3DR00004 (continental) 1

PT-LB80NTE/EA, PT-LB80E/EA, PT-LB75NTE/EA,  
PT-LB75E/EA:

K2CT3DR00008 (U.K) 1

K2CM3DR00004 1

**RGB signal cable (K1HA15DA0002) :** 1

**CD-ROM** (PT-LB80NT\*\*/LB75NT\*\* only)

TQBH9011 1

**Carrying bag** (TPEP021) : 1

**Power cord secure lock** (TMXX051) : 1

### Options:

**Ceiling bracket:** ET-PKB80

- Specifications are subject to change without notice.
- Weight and dimensions shown are approximate.

**⚠ WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

**Trademark Acknowledgements**

- VGA and XGA are trademarks of International Business Machines Corporation.
  - S-VGA is a registered trademark of the Video Electronics Standards Association.
  - The font used in the on-screen displays is a Ricoh bitmap font, which is manufactured and sold by Ricoh Company, Ltd.
- All other trademarks are the property of the various trademark owners.

**Precaution**

If using of this projector at high elevations (above 1 400 m), set ALTITUDE to HIGH. (Refer to "Option settings" in Operating Instructions.)

Failure to observe this may cause malfunctions.

Never use this projector at an elevation of 2 700 m or higher.

Using this projector at high elevations, consult your dealer or Authorized Service Center about preparations.

**About lead free solder (PbF)**

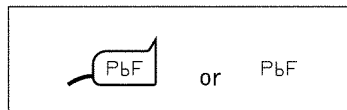
This projector is using the P.C.Board which applies lead free solder. The use of lead free solder is recommended from the standpoint of antipollution for the global environment in service.

Notes:

- Lead free solder: Sn-Ag-Cu (tin, silver and copper) has a higher melting point (approx. 217°C) than standard solder. Typically, the melting point is 30°C to 40°C higher. When servicing, use a high temperature soldering iron with temperature limitation function and set it to 370±10°C.
- Be precautionous about lead free solder: Sn-Ag-Cu (tin, silver and copper) will tend to splash when heated too high (approx. 600°C or higher).
- Use lead free solder for the P.C.Board (specified on it as "PbF") which uses lead free solder. (When you unavoidably use lead solder, use lead solder after removing lead free solder. Or be sure to heat the lead free solder until it melts completely, before applying lead solder.)
- After soldering to double layered P.C.Boards, check the component side for excess solder which may flow onto the opposite side.

About the identification of the lead free solder P.C.Board

For the P.C.Board which applies lead free solder, the symbol as shown in the figure below is printed or stamped on the surface or the back of P.C.Board.



For US

**IMPORTANT SAFETY NOTICE**

There are special parts used in Panasonic LCD Projectors which are important for safety. These parts are shaded on the schematic diagram. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of PANASONIC BROADCAST & TELEVISION SYSTEMS COMPANY.

**WARNING:**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**CAUTION:** Any unauthorized changes or modifications to this equipment will void the users authority to operate.

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# 1 Safety Precautions

## 1.1. General Guidelines

- For continued safety, no modification of any circuit must be attempted.
- Unplug the power cord from the power outlet before disassembling this projector.
- Use correctly the supplied power cord and must ground it.
- It is advisable to use an isolation transformer in the AC power line before the service.
- Be careful not to touch the rotation part (cooling fan, etc.) of this projector when you service with the upper case removed and the power supply turned ON.
- Observe the original lead dress during the service. If a short circuit is found, replace all the parts overheated or damaged by the short circuit.
- After the service, all the protective devices such as insulation barriers, insulation papers, shields, and isolation R-C combinations must be properly installed.
- After the service, check the leakage current to prevent the customer from getting an electric shock.

## 1.2. Leakage Current Check

1. Prepare the measuring circuit as shown in Fig.1.

Be sure to use a voltmeter having the performance described in Table 1.

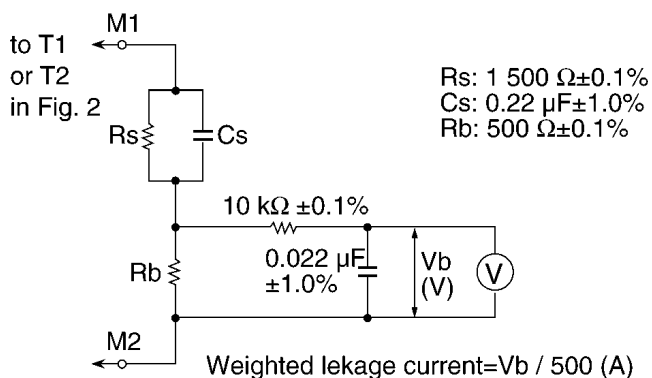


Fig. 1

	Performance
Voltmeter (rms reading)	Accuracy: $\leq 2\%$
	Input resistance: $\geq 1 \text{ M}\Omega$
	Input capacitance: $\leq 200 \text{ pF}$
	Frequency range: 15 Hz to 1 MHz

Table 1

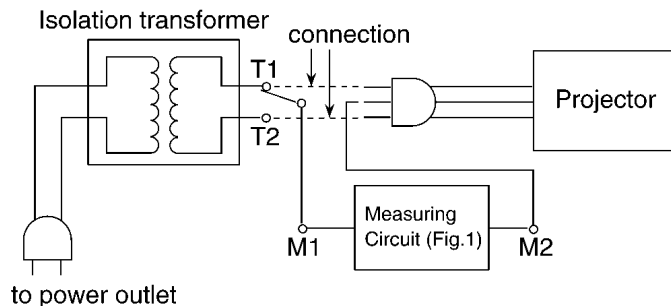


Fig. 2

2. Assemble the circuit as shown in Fig. 2. Plug the power cord in a power outlet.
3. Connect M1 to T1 according to Fig. 2 and measure the voltage.
4. Change the connection of M1 from T1 to T2 and measure the voltage again.
5. The voltmeter must read 0.375 V or lower in both of steps 3 and 4. This means that the current must be 0.75 mA or less.
6. If the reading is out of the above standard, the projector must be repaired and rechecked before returning to the customer because of a possibility of an electric shock.

## 1.3. UV Precaution and UHM Lamp Precautions

- Be sure to unplug the power cord from the power outlet when replacing the lamp.
- Because the lamp reaches a very high temperature during its operation, wait until it cools completely when replacing the Lamp Unit.
- The lamp emits small amounts of UV-radiation, avoid direct-eye contact with the light.
- The lamp unit has high internal pressure. If improperly handled, explosion might result.
- Because the high pressure lamp involves a risk of failure, never touch the lamp wire lead during the service. (See Fig. 3)

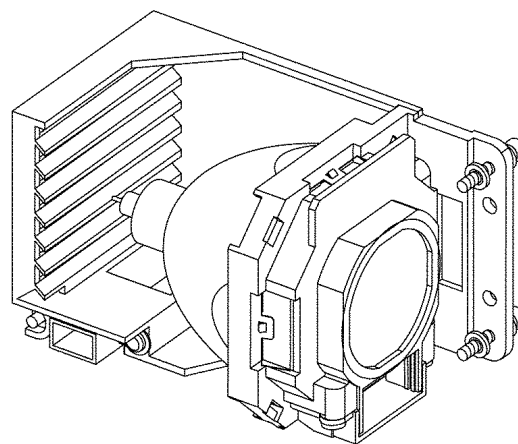


Fig.3

## 2 Ext Option

This projector has EXT OPTION in addition to standard on-screen menus.

- There are SELF CHECK and TEST PATTERN for service, etc.

### 2.1. Procedure to enter EXT OPTION

1. Press "MENU" button on the main unit or remote control unit to display "MENU" screen, then select "OPTION" and press "ENTER" button.
2. Select "INPUT GUIDE" on "OPTION" menu and press "ENTER" button 3 seconds or longer.

MENU → OPTION → INPUT GUIDE

### 2.2. EXT OPTION Menu and Functions

EXT OPTION	
FREEZE MESSAGE	OFF / ON
FAN FULL MODE	OFF / ON
AUTO SETUP	STANDARD / SPECIAL
SYNC	STANDARD / SPECIAL
VGA60/480p	AUTO/VGA60/480p
HPLL	OFF / ON
EMULATE	DEFAULT/TYPE1/TYPE2/OTHER
AUDIO IN STANDBY	OFF / ON
OVER SCAN	1 / 2
LAST POWER MEMORY	OFF / ON
CLOSED CAPTION	STANDARD / SPECIAL
MENU LOCK	OFF / ON
MENU LOCK PASSWORD	
ANGLE RESET	
SELF CHECK	
TEST PATTERN	
FLICKER ADJUST	

— PT-LB80NTU/LB80U/LB75NTU/LB75U only

#### • FREEZE MESSAGE

Switching ON/OFF "FREEZE" on-screen display

#### • FAN FULL MODE

Setting the cooling fan motor rotation speed

- Switching ON "FAN FULL MODE", the rotation level of the fan becomes high-speed rotation (fixed). Moreover, when "FAN FULL MODE" is ON, changing "ALTITUDE" in OPTION becomes impossible (setting "FAN FULL MODE" is given priority more than "ALTITUDE").

#### • AUTOSETUP

Setting AUTO SETUP mode

- STANDARD: To set the normal mode (the dot clock is adjusted strictly))
- SPECIAL: To set the special mode (the dot clock is adjusted roughly)

#### Note:

- Do not change the initial setting (STANDARD).

#### • SYNC

Setting SYNC processing mode

- STANDARD: To set the normal mode
- SPECIAL: To set the special mode (noise reduction mode)

#### Note:

- Do not change the setting when it is possible to receive normally.

Change the setting only when the image is not displayed normally because of the sync signal noise of connected equipment.

#### • VGA60/480p

- AUTO: Switching RGB of VGA60 and 480p automatically
- VGA60: Inputting signals in 59.9Hz / VGA480
- 480p: Inputting signals in RGB of 480p

#### • HPLL

When non-standard signal of VIDEO/S-VIDEO is inputted (VCR, VHD, etc.), horizontal synchronization might be disordered according to connected equipment. In this case, set HPLL to OFF.

#### • EMULATE

Switching the operation of RS-232C command to communicate with models other than LB80 series.

- DEFAULT: LB80 series standard, F100 series standard, D3500
- TYPE1: L730/L780/L735/LB/LC series
- TYPE2: L785
- OTHER: Models other than the above-mentioned (Consult your dealer or Authorized Service Center for details.)

#### • AUDIO IN STANDBY

Setting the audio output when STANDBY

- OFF: Does not output it.
- ON: Outputs it.

##### **Note:**

- When setting it to "ON", audio source of the input channel when the power supply is turned off (switched to STANDBY) is outputted. Do with the remote control unit, control panel or RS-232C communication when you switch the channel. The audio volume can be adjusted by the remote control unit or RS-232C communication.

#### • OVER SCAN

Setting the rate of over scanning

- 1: Approx. 6%
- 2: Approx. 4%

##### **Note:**

- Normally, set it to "1".

#### • LAST POWER MEMORY

- ON: Ordinary mode [If unplugging the power cord during the projecting mode (lamp ON), the projector will start from the projecting mode when the power cord will be connected next time.]
- OFF: Always becomes STANDBY mode [Even if unplugging the power cord during the projecting mode (lamp ON), the projector will start from the standby mode when the power cord will be connected next time.]

##### **Note:**

It is effective only when the setting of "DIRECT POWER ON" that is the submenu of "OPTION" menu is OFF.

#### • CLOSED CAPTION

- STANDARD: To set the normal mode
- SPECIAL: To set the special mode

(For DVD and/or VCR with time-based corrector, jitter of the character is improved.)

##### **Note:**

- Do not change the setting when it is possible to receive normally.
- Normally, set it to "STANDARD".

#### • MENU LOCK

Switching ON/OFF "MENU LOCK" function

- OFF: Accessible to MENU
- ON: The access to MENU is restricted (The password is required).
  - When MENU LOCK is set to "ON", the password input screen is displayed when it accesses the menu, and the adjustment in the menu item is locked.

#### • MENU LOCK PASSWORD

Setting the password into MENU LOCK

- The default password is "AAAA".

When you want to reset the password into the default password, do the following operation.

1. Press on the remote control unit the AUTO SETUP button, or on the main unit the INPUT SELECT button and the ▲ button at the same time for 2 seconds or more.
2. Press ▼ button for 2 seconds or more.

#### • ANGLE RESET

Resetting "Real-time Keystone" reference level

**Note:**

– Normally, do not select. (Angle reset data will be rewritten.)

**• SELF CHECK**

To enter the self-check mode

**• TEST PATTERN**

To display test patterns

**• FLICKER ADJUST**

To enter the flicker adjustment mode

## **2.3. Canceling EXT OPTION**

Press "MENU" button on the main unit or remote control unit.

# **3 Self-Check Mode**

This mode is used to narrow down the location of the failure.

## **3.1. Procedure to enter the self-check mode**

Select "SELF CHECK" on "EXT OPTION" menu and press "ENTER" button on the main unit or remote control unit.

### 3.2. Self Check Display and Contents

Display example PT-LB80NT\*\*/LB75NT\*\* only

①	SELF CHECK	MM1.00	NT1.00	S/N *****	⑮
②		XGA60			
③		H ***.***kHz		G- SAVED OK	⑲
④		V ***.***Hz		U- SAVED OK	⑳
⑤		-----TEMP-----			
⑥	TEMP	OK			
⑦	INTK	***	INTK	***	㉑
⑧	EXST	***	EXST	***	㉒
⑨	FLTR	***	FLTR	***	㉓
⑩		-----FAN-----			
⑪	IN RB	OK	IN G	OK	㉔
⑫	LAMP	OK	PWR	OK	㉕
⑬	EXST	OK			
⑭		-----ANGLE-----			
⑮	ANGLE	***			
⑯		-----LAMP-----			
⑰	LAMP	OK	3000H	OK	㉖
⑱		-----UNIT HISTRY-----			
㉑	TOTAL	*****H	RESET	**	㉗
㉒	*****H***	**	*****H***		
㉓	*****H***	**	*****H***		
㉔	*****H***	**	*****H***		

\* This display is an example and the display contents depend on the input signal mode.

• The result of items "G SAVED" and "U SAVED", "OK" is displayed for OK and "NG" is displayed for NG.

• The result of items "TEMP", "FAN" (IN RB, IN G, LAMP, PWR, EXST) and "LAMP" (LAMP, 3000H), the OK display becomes red characters when shutting down because abnormality happened last time.

	Display Contents	Remarks
①	Software Version	Main microprocessor and Network/SD CPU (PT-LB80NT**/LB75NT** only) software version
②	Signal discrimination: Resolution name	Input signal name (Displays "No-Sync" when no signal input.)
③	Horizontal Signal Frequency	COMPUTER (RGB) signal reception only
④	Vertical Signal Frequency	
⑤	Temperature Abnormality Check	Cause of Lamp Malfunction
⑥	Intake Air Thermosensor Measurement Value *1	Around Air Inlet (A/D conversion value: 0 - 255)
⑦	Exhaust Air Thermosensor Measurement Value *1	Around Air Outlet (A/D conversion value: 0 - 255)
⑧	Blocked Thermosensor Measurement Value	On the M2-P.C.Board (A/D conversion value: 0 - 255)
⑨	Intake Fan (R, B) Stop Check	It is distinguished whether the fan operates correctly.
⑩	Lamp Fan Stop Check	It is distinguished whether the fan operates correctly.
⑪	EXhaust Fan Stop Check	It is distinguished whether the fan operates correctly.
⑫	Degree of angle of the projector	Degree of angle of the projector that is temperature-corrected output value of the acceleration sensor
⑬	Lamp - Abnormality Check	Cause of Lamp Malfunction
⑭	Total Usage Time	Projector Cumulative Usage Time
⑮	Lamp ON - Cumulative Usage Time / Frequency	Current
⑯		Second
⑰		First
⑱	Product Serial Number	Displays the serial number of this projector.
⑲	Gamma Correction Data Check	It is distinguished whether gamma data is stored in the flash ROM.
㉑	Color Unevenness Correction Data Check	It is distinguished whether color unevenness correction data is stored in the flash ROM.
㉒	Intake Air Thermosensor A/D Conversion Value	Temperature (0 - 255) around the air inlet when the last thermal shutdown occurs
㉓	Exhaust Air Thermosensor A/D Conversion Value	Temperature (0 - 255) around the air outlet when the last thermal shutdown occurs
㉔	Blocked Thermosensor A/D Conversion Value	Thermosensor measurement value (0 - 255) when the last thermal shutdown occurs
㉕	Intake Fan (G) Stop Check	It is distinguished whether the fan operates correctly.
㉖	Power Fan Stop Check	It is distinguished whether the fan operates correctly.
㉗	Lamp - Judgment for Cumulative Usage more than 3 000 h	Judgment for Replacement Time of Lamp
㉘	Lamp - Reset Frequency of Cumulative Usage Time	Reset Frequency

\*1 When detected abnormal temperature (high temperature around the air inlet and/or outlet ports), TEMP indicator turned on. If arriving at the critical temperature, the power supply will be shutdown automatically and the indicator will flash.

### 3.3. Canceling the self-check mode

Press "MENU" button on the main unit or remote control unit.

## 4 Test Pattern

This projector displays seven kinds of test patterns [Horizontal lines, Vertical lines, Dots, Crosshatch, White cross, Black cross and White (No pattern)] in the four colors (White, Red, Green and Blue).

**Note:**

- Because the above patterns can be displayed by each color without test equipment such as PC or SG, use it for simplified adjustments by your eyes and so on.

### 4.1. Procedure to display test patterns

Select "TEST PATTERN" on "EXT OPTION" menu and press "ENTER" button on the main unit or remote control unit.

**Note:**

- On the test pattern screen, pressing the up-arrow " ▲ " or down-arrow " ▼ " button allows the test pattern selection and the left-arrow " ◀ " or right-arrow " ▶ " button the color selection (White / Red / Green / Blue).

### 4.2. Canceling the test pattern display

Press "MENU" button on the main unit or remote control unit.

## 5 Flicker Adjustment Mode

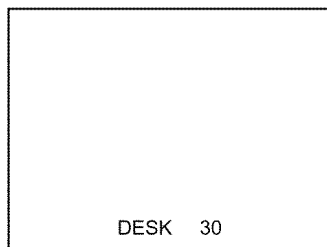
If replacing the optical parts (LCD Panel / LCD block) of this projector and/or A-P.C.Board (assembly), enter the flicker adjustment mode and minimize the flicker.

### 5.1. Procedure to enter the adjustment mode

Select "FLICKER ADJUST" on "EXT OPTION" menu and press "ENTER" button on the main unit or remote control unit.

**Note:**

"DESK setting (blue)" is displayed when entering the adjustment mode.



Adjustment Display when DESK setting

### 5.2. Adjustment Display and Contents

- Setting value is increased and decreased with the right-arrow " ▶ " and left-arrow " ◀ " buttons.
  - " ◀ ": Decrease, " ▶ ": Increase
    - Adjust the setting value to minimize the flicker on the screen.
    - Execute the adjustment by 6 patterns below.
- The pattern (adjustment display) is switched with the up-arrow " ▲ " and down-arrow " ▼ " buttons.
  - " ▲ ": Forward direction, " ▼ ": Reverse direction
    - There are 6 patterns of "DESK setting (blue)", "DESK setting (red)", "DESK setting (green)", "CEILING setting (blue)", "CEILING setting (red)" and "CEILING setting (green)".
    - The setting value is saved into this projector when the pattern is switched.

### 5.3. Canceling the flicker adjustment mode

Press "MENU" button on the main unit or remote control unit.

**Note:**

When "MENU" button is pressed, the setting value at that time is saved into this projector and the adjustment mode is canceled.

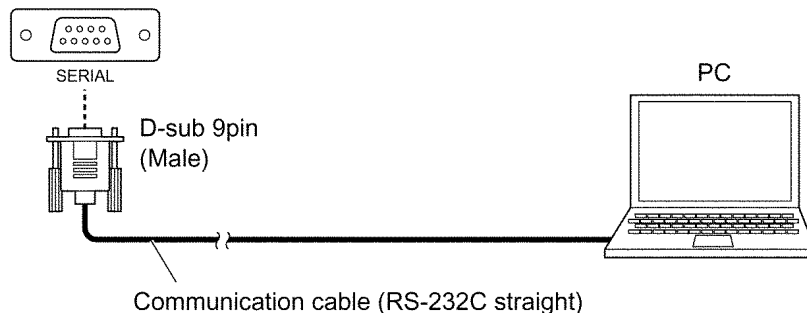
## 6 Using the SERIAL Connector

The serial connector which is on the back connector panel of the projector conforms to RS-232C standard. This projector can be controlled by a PC which is connected as shown in "6.1. Connection".

For controlling this projector by a PC, requires communication software on the market, and inputs control commands according to Communication Settings and Control Commands below.

### 6.1. Connection

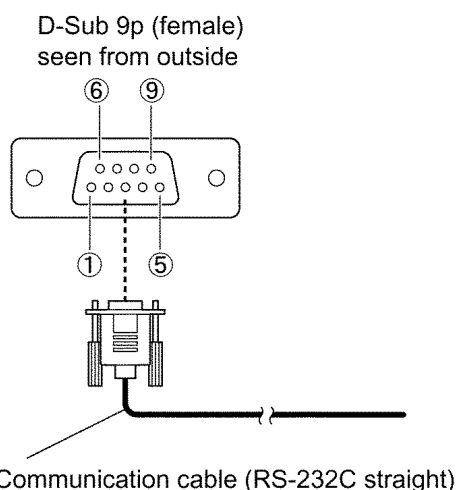
〈Back connector panel of the projector〉



#### Note:

Use a proper communication cable which is suitable for the PC to connect SERIAL connector and the PC.

### 6.2. Pin Layout and Signal Names for SERIAL Connector



Pin No	Signal Name	Contents
1	---	NC
2	TXD	Transmit data
3	RXD	Receive data
4	---	NC
5	GND	Ground
6	DSR	Connected internally
7	CTS	
8	RTS	
9	---	NC

### 6.3. Communication Settings

Signal Level	Contents		Description
Sync. method	Conforms to RS-232C standard	Asynchronous	Synchronizes every 1 character (8 bits)
Baud rate		9 600 bps	Data transfer speed
Parity		None	Error detection method
Character length		8 bits	Number of bit composing 1 character
Stop bit		1 bit	Uses stop bit when asynchronous method
X parameter		Not used	
S parameter		Not used	

6.4. Control commands

PrintDB  
Refer to "Control Commands".

6.5. Communication Cable Specifications

At the projector		At the PC (DTE)	
1	NC	NC	1
2			2
3			3
4			4
5	NC	NC	5
6	DSR	NC	6
7			7
8			8
9	NC	NC	9



## 7 Disassembly Instructions

### Warning:

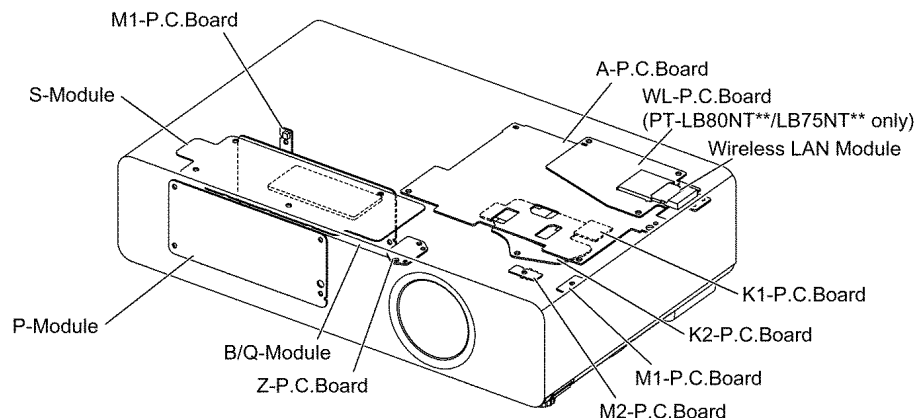
- Be sure to unplug the power cord from the power outlet before disassembling this projector.

### Caution:

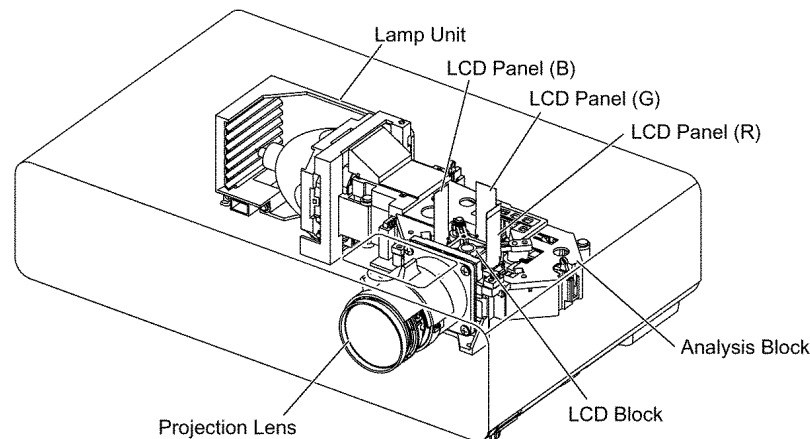
- While turning over a printed circuit board, be sure to put a insulating material under it to prevent a short circuit.
  - Printed circuit boards and wires must not be pulled forcibly, but be handled carefully.
  - Connectors also must be handled carefully.
  - When reassembling, replace used adhesive tape with new one (Do not re-use used tape).
  - After repairing this projector, be sure to put back the wires and connectors to the original condition.
  - Service or repair the product according to service information on the service manual, etc. so that a fire, injury or electric shock caused by an improper repair may not occur.
1. Do not modify equipments, components and materials when attempting to service or repair.
  2. Do not repair nor connect wires even in case of a part of the disconnection when the wiring unit is supplied as a replacement parts, replace the wiring unit (complete).
  3. For a fasten terminal (push-in type terminal), pull out or insert straightly without twisting it.
  4. When the fuse has blown, do not turn on the power supply replacing only the fuse because the secondary disaster of fumes, fire or other hazards is expected. Turn on the power supply after doing the confirmation and measures of defective causes (structure and circuit, etc.).
  5. After the service or the repair is completed, confirm the operation of the product is normal.
  6. Do handling and safekeeping carefully because the user setup information remains in the projector.

### 7.1. Printed Circuit Board and Main Parts Location

#### Electrical Parts

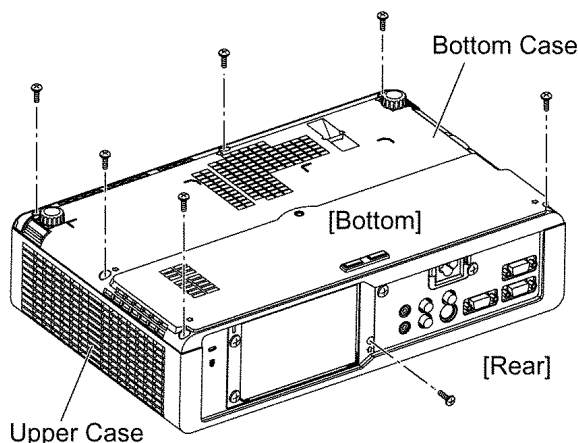


#### Optical Parts



## 7.2. Removal of Upper Case

1. Turn the projector upside down.
2. Unscrew the 7 screws.



3. Return the projector to the normal position.
4. Remove the upper case.

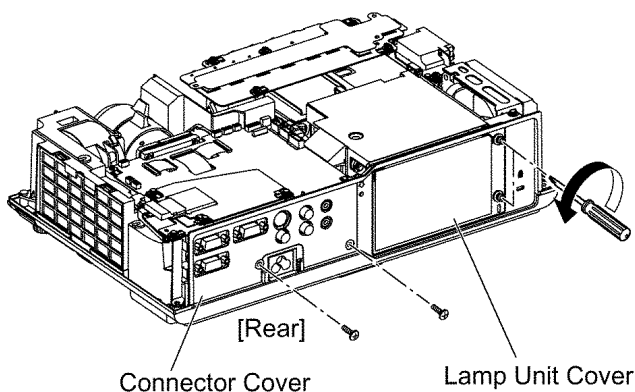
## 7.3. Removal of A-P.C.Board

1. Remove the upper case according to the section 7.2. "Removal of Upper Case".
2. Loosen the 2 screws until they idle, remove the lamp unit cover.

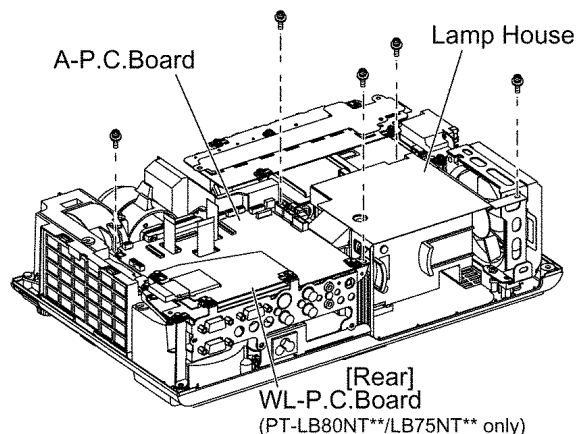
### Note:

- For the interlock switch damage prevention when reassembling, must remove the lamp unit cover.

3. Unscrew the 2 screws and remove the connector cover.



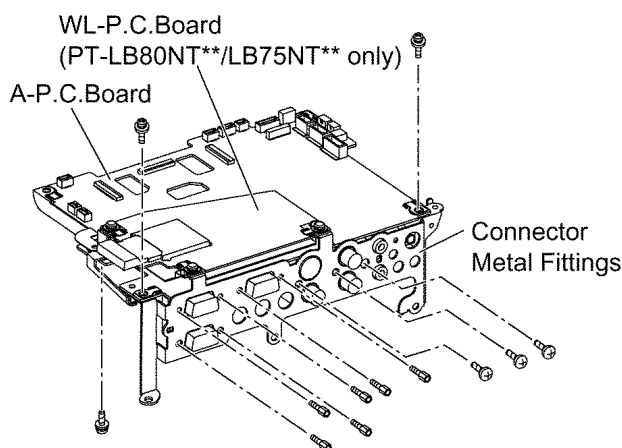
4. Unscrew the 3 screws and remove the Lamp house.
5. Unscrew the 2 screws and remove the A-P.C.Board block (with WL-P.C.Board).



6. Unscrew the 12 screws and remove the connector metal fittings.

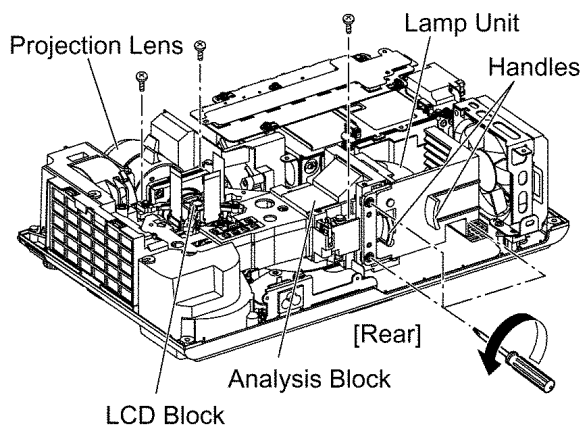
### Note:

- For PT-LB80NT\*\*/LB75NT\*\*, WL-P.C.Board is attached on the connector metal fittings. Be careful with handling.

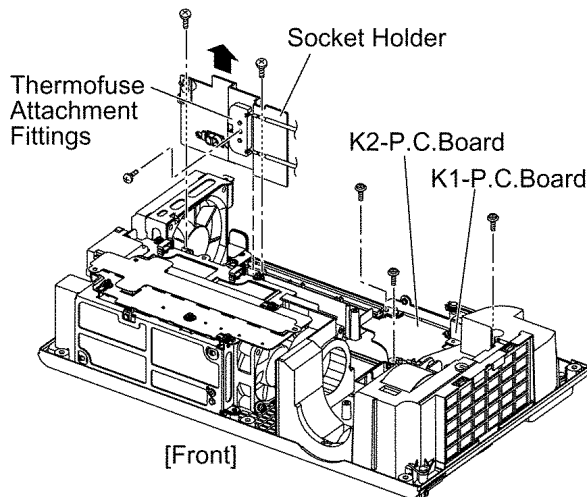


## 7.4. Removal of K1-P.C.Board and K2-P.C.Board Block

1. Remove the A-P.C.Board block according to the steps 1 through 5 in the section 7.3. "Removal of A-P.C.Board".
2. Loosen the 3 screws until they idle, remove the lamp unit with the handle.
3. Unscrew the 3 screws and remove the block of Analysis Block, LCD Block and Projection Lens.

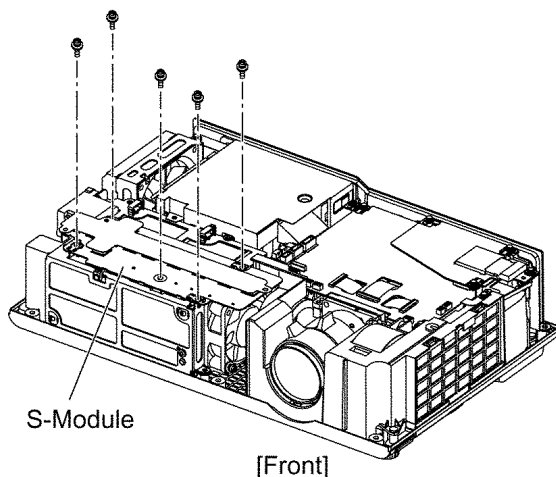


4. Unscrew the 2 screws fixing the socket holder.
5. Lift the socket holder, then unscrew the 1 screw and remove the thermofuse attachment fittings.
6. Disconnect the connector between power block and K2-P.C.Board.
7. Unscrew the 3 screws and remove the block of K1-P.C.Board and K2-P.C.Board.



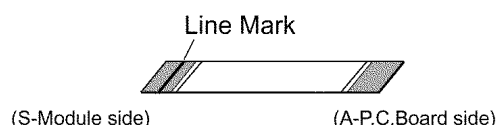
## 7.5. Removal of S-Module

1. Remove the upper case according to the section 7.2. "Removal of Upper Case".
2. Unscrew the 5 screws and remove the S-Module.



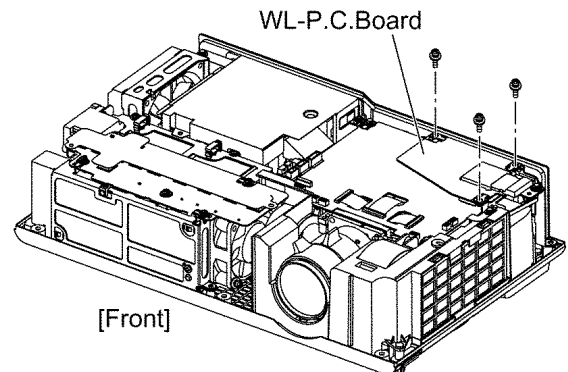
### Note:

- If you disconnected the flexible cable between S-Module and A-P.C.Board, must put back it to the original condition (Connection described below).
- If it makes a mistake in the direction of insertion, the projector does not operate correctly.



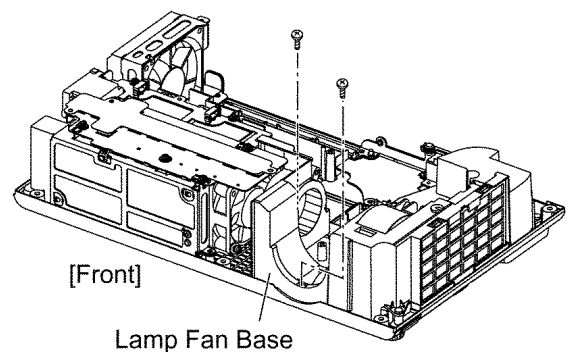
## 7.6. Removal of WL-P.C.Board (Only for PT-LB80NT\*\*/LB75NT\*\*)

1. Remove the upper case according to the section 7.2. "Removal of Upper Case".
2. Unscrew the 3 screws and remove the WL-P.C.Board.

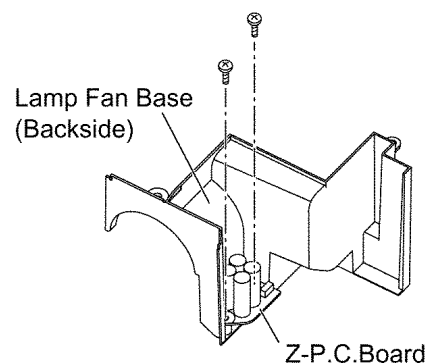


## 7.7. Removal of Z-P.C.Board

1. Remove the block of Analysis Block, LCD Block and Projection Lens according to the steps 1 through 3 in the section 7.11. "Removal of Analysis Block and Projection Lens".
2. Unscrew the 2 screws and remove the lamp fan base.

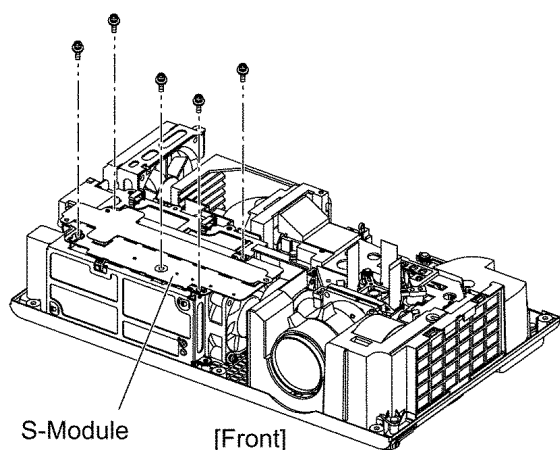


3. Unscrew the 2 screws and remove the Z-P.C.Board.

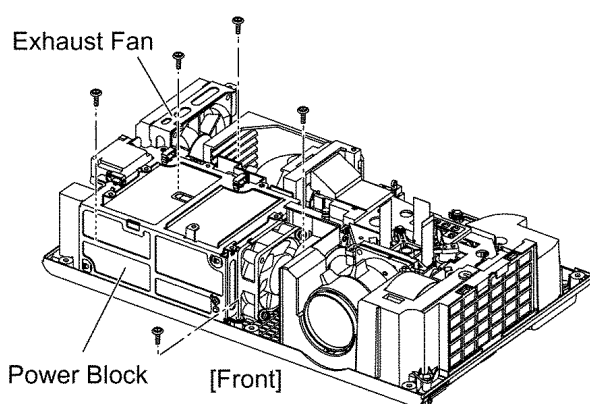


## 7.8. Removal of B/Q-Module

1. Remove the A-P.C.Board block according to the steps 1 through 5 in the section 7.3. "Removal of A-P.C.Board".
2. Unscrew the 5 screws and remove the S-Module.



3. Unscrew the 2 screws and remove the exhaust fan.
4. Unscrew the 3 screws fixing the power block (B/Q-Module and P-Module).

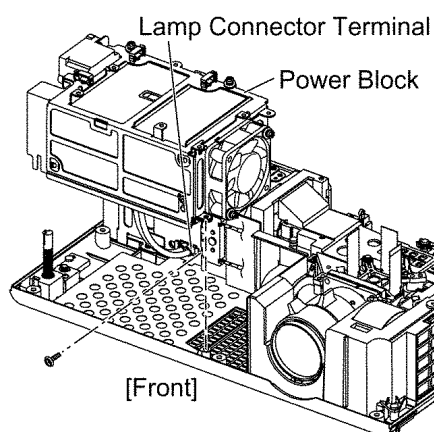


5. Lift the power block, then unscrew the 1 screw and remove the lamp connector terminal.

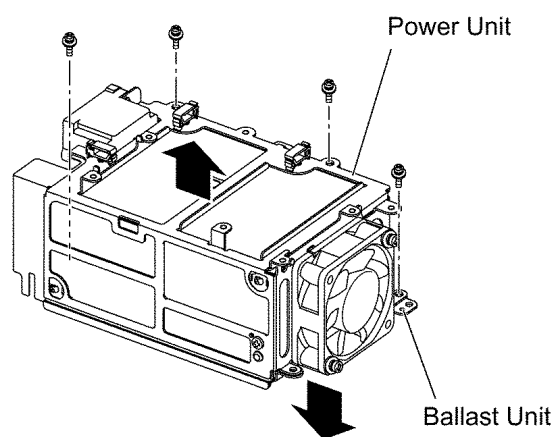
**Note:**

- Because the lead wire between the power block and the lamp connector terminal is short, be careful not to apply excessive force into it.

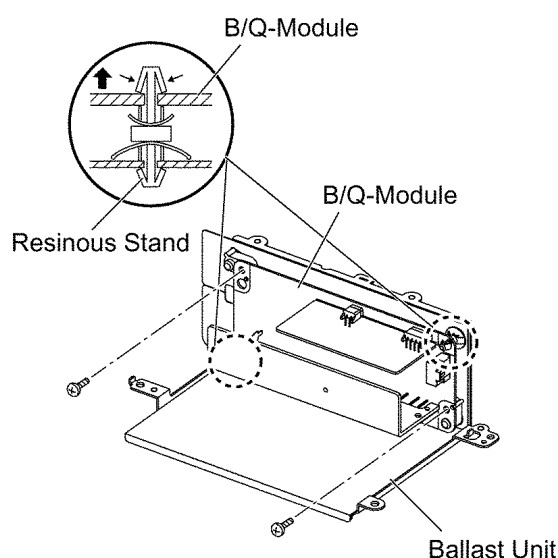
6. Remove the power block.



7. Unscrew the 4 screws and separate the ballast unit and the power unit.

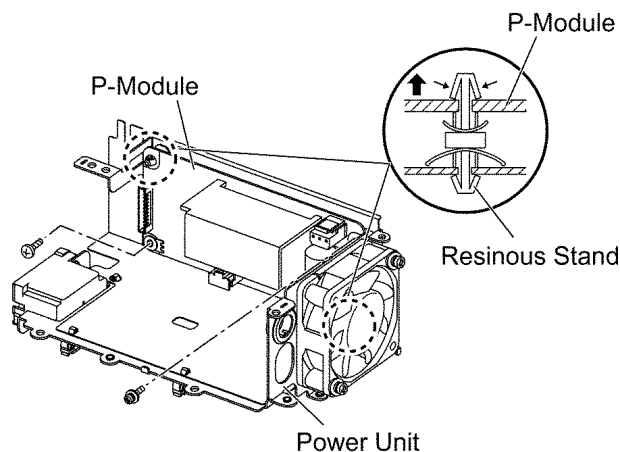


8. Unscrew the 2 screws.
9. While pressing to shut each hook of the 2 resinous stands, remove the B/Q-Module.



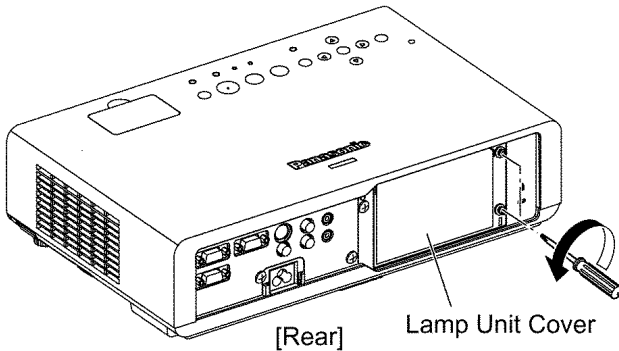
## 7.9. Removal of P-Module

1. Remove the power unit (P-Module block) according to the steps 1 through 7 in the section 7.8. "Removal of B/Q-Module".
2. Unscrew the 2 screws.
3. While pressing to shut each hook of the 2 resinous stands, remove the P-Module.

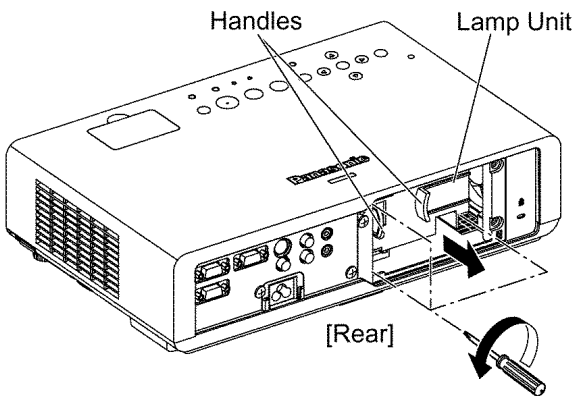


## 7.10. Removal of Lamp Unit

1. Loosen the 2 screws until they idle, remove the lamp unit cover.



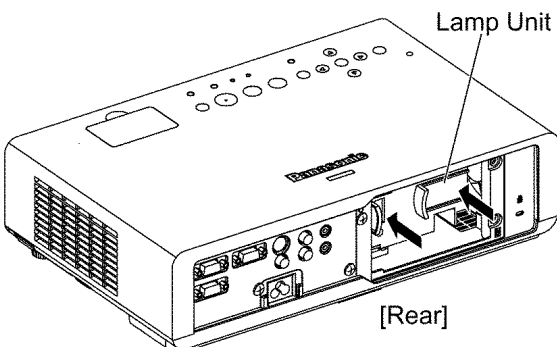
2. Loosen the 3 screws until they idle, remove the lamp unit with the handles.



### Note:

- When installing the lamp unit in the main unit, place it in a specified position and press the connector side and the opposite sides of the lamp unit (arrow positions shown in the figure below), and confirm the lamp unit is inserted securely.

Then, tighten the 3 screws fixing the lamp unit, and attach the lamp unit cover.

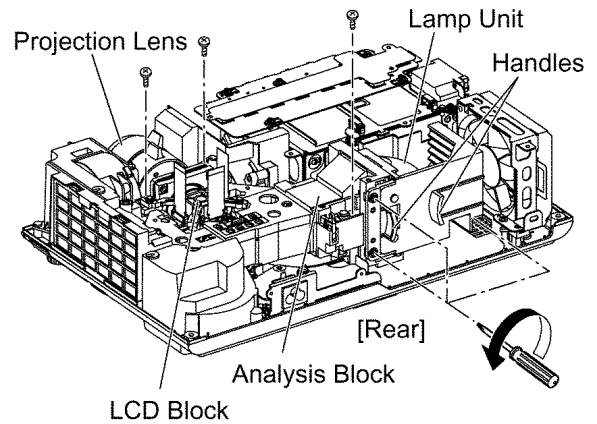


## 7.11. Removal of Analysis Block and Projection Lens

1. Remove the A-P.C.Board block according to the steps 1 through 5 in the section 7.3. "Removal of A-P.C.Board".
2. Loosen the 3 screws until they idle, remove the lamp unit

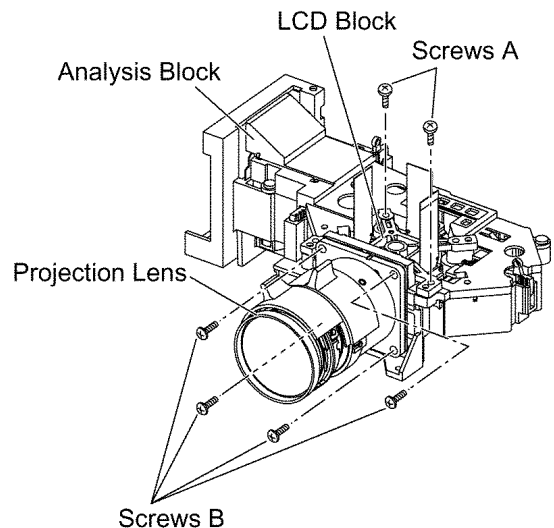
with the handle.

3. Unscrew the 3 screws and remove the block of Analysis Block, LCD Block and Projection Lens.



4. Unscrew the 2 screws A and remove the LCD block .

5. Unscrew the 4 screws B and remove the projection lens (the analysis block remains).

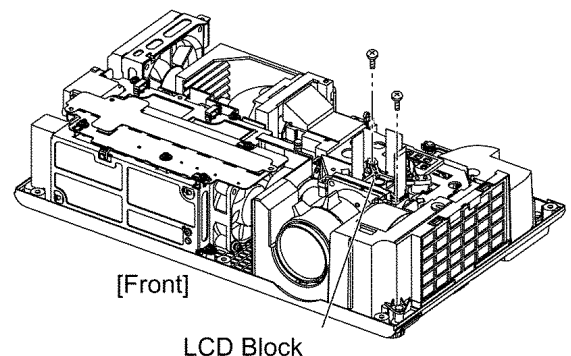


## 7.12. Removal of LCD Block

1. Remove the A-P.C.Board block according to the steps 1 through 5 in the section 7.3. "Removal of A-P.C.Board".
2. Unscrew the 2 screws and remove the LCD block.

### Note:

- Be careful not to touch the surface of prism and LCD panel.



## 7.13. Replacement of LCD Panel (B)

1. Remove the LCD block according to the section 7.12. "Removal of LCD Block".

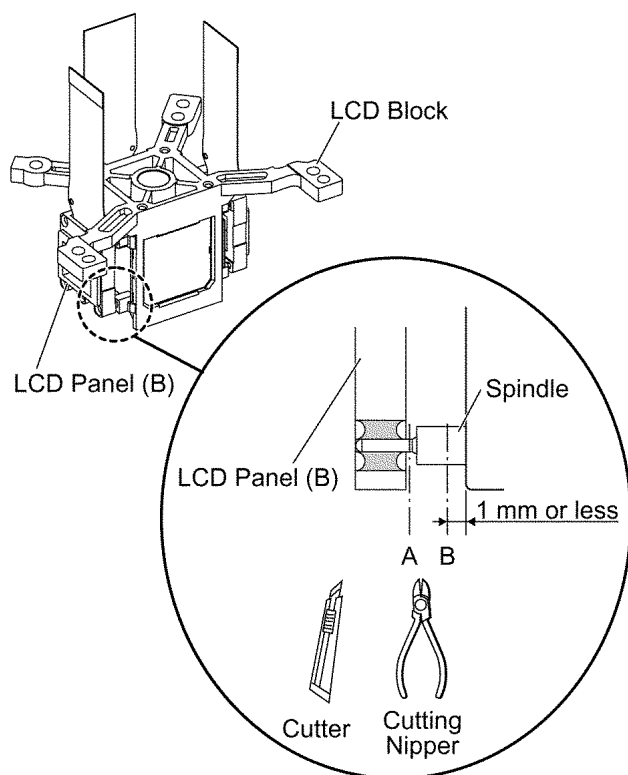
**Note:**

- Be careful not to touch the surface of prism and LCD panel.

2. Cut the 4 LCD panel installation spindles at the position A and remove the LCD panel.
3. Cut the 4 LCD panel installation spindles at the position B and remove them.

**Notes:**

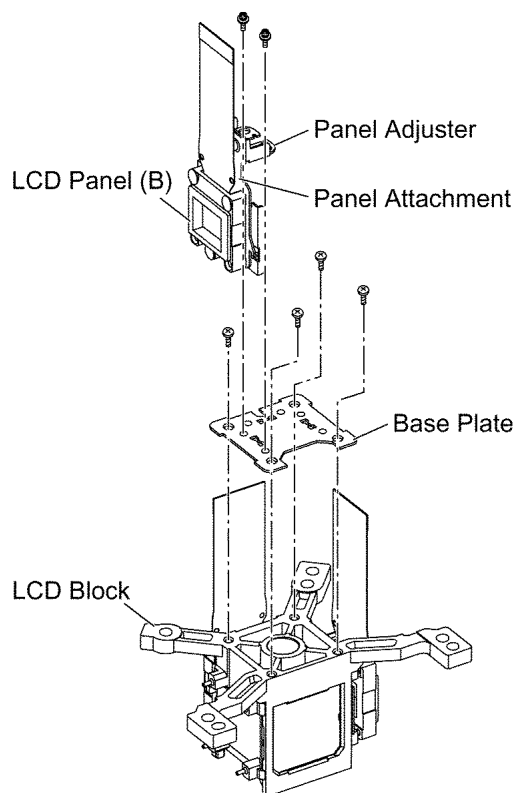
- Work carefully not to apply external force around the spindle part by using a cutter, cutting nipper or the like for cutting the spindle.
- Adjust the height after the spindle is cut to 1 mm or less.



4. Attach the base plate with 4 screws.
5. Tighten the 2 screws temporarily just until new LCD panel (with the panel attachment and panel adjuster) can be shifted by your fingers.

**Note:**

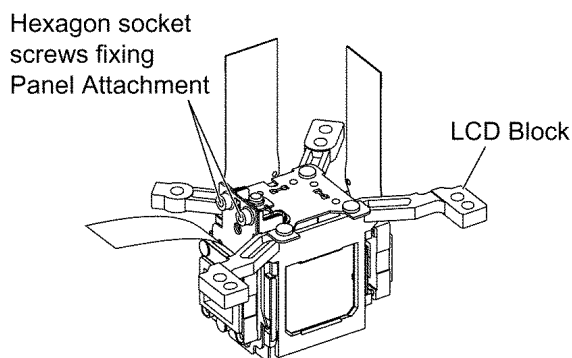
- The panel adjustment fittings set (panel attachment, panel adjuster and base plate) is an option for service.



6. Reassemble the projector in the reverse order of disassembling, but leave the upper case and the screws fixing the A-P.C.Board block as they are removed.
7. Adjust the convergence according to the section 8.3. "Convergence Adjustment".
8. After the adjustment, while paying attention not to vary the adjusting result, tighten the 2 screws fixing the panel attachment with a hexagon head wrench.

**Note:**

- Prepare a hexagon head wrench processed short.



9. Reassemble the projector as it was.

## 7.14. Replacement of Incidence Polarizer (G)

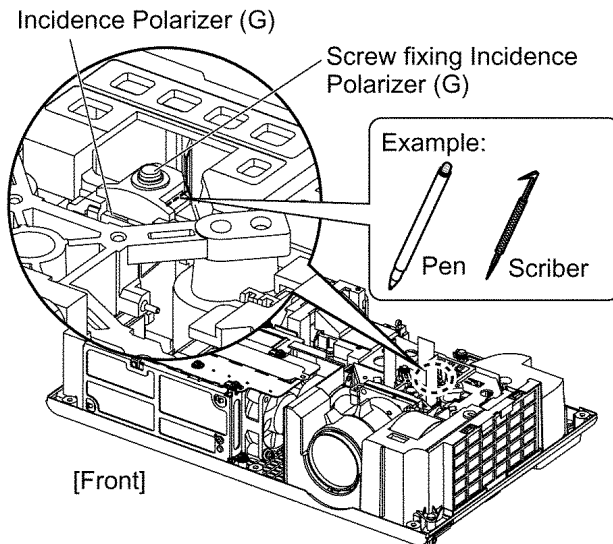
1. Remove the A-P.C.Board block according to the steps 1 through 5 in the section 7.3. "Removal of A-P.C.Board".
2. Mark positions of the incidence polarizer (G).

**Note:**

- Mark accurately as possible because the marks will

be used for resetting the incidence polarizer position.

3. Unscrew the 1 screw and remove the incidence polarizer (G).
4. Attach a new incidence polarizer (G) and align it with the mark.
5. Tighten the 1 screw with care not to move the incidence polarizer position.

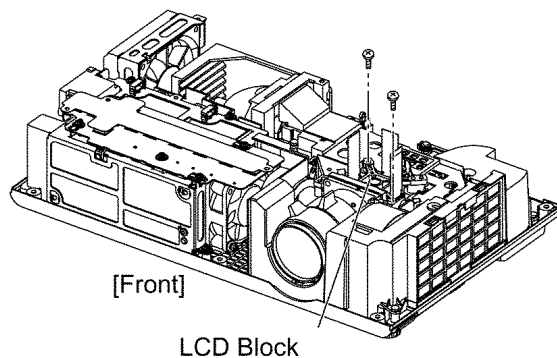


## 7.15. Replacement of Incidence Polarizer (R and B)

1. Remove the A-P.C.Board block according to the steps 1 through 5 in the section 7.3. "Removal of A-P.C.Board".
2. Unscrew the 2 screws and remove the LCD block.

### Note:

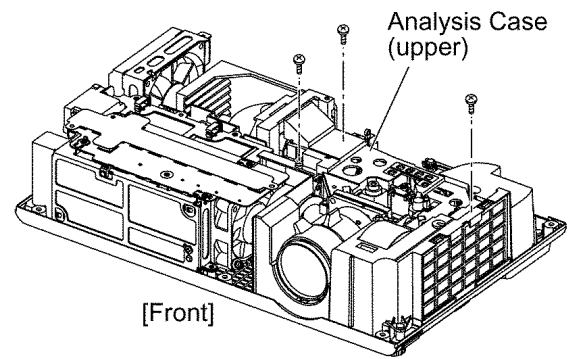
- Be careful not to touch the surface of prism and LCD panel.



3. Unscrew the 3 screws and remove the analysis case (upper).

### Note:

- The incidence polarizer (G) is installed in the analysis case (upper). Handle with care not to apply external force to the incidence polarizer (G).

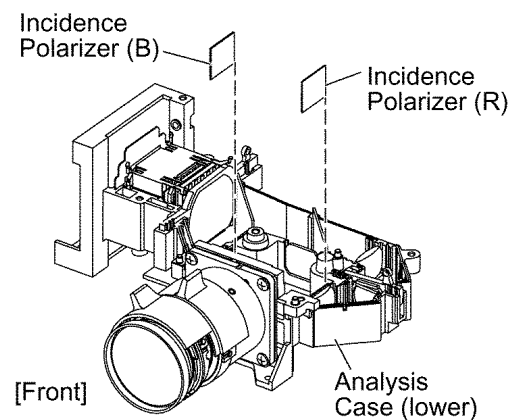


4. Replace the incidence polarizer.

### Note:

- Do not touch the incidence polarizer directly by the hand.

Must use a fingerstall or clean gloves.



## 7.16. Replacement of Projection Polarizer

- The procedure is described as an example of projection polarizer (B).

1. Remove the LCD block according to the section 7.12. "Removal of LCD Block".

### Note:

- Be careful not to touch the surface of prism and LCD panel.

2. Remove the projection polarizer which requires replacing. (The projection polarizer is secured with adhesive tape.)

### Notes:

- Be careful not to damage peripheral components (prism, LCD panel, etc.).
- Use tweezers.

3. Install new projection polarizer.

a. Put adhesive tape on the projection polarizer.

b. Stick the projection polarizer on the specified position.

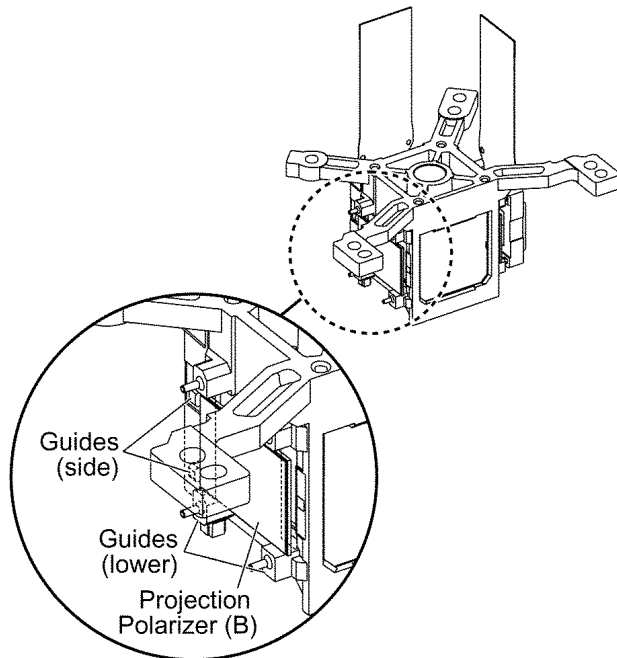
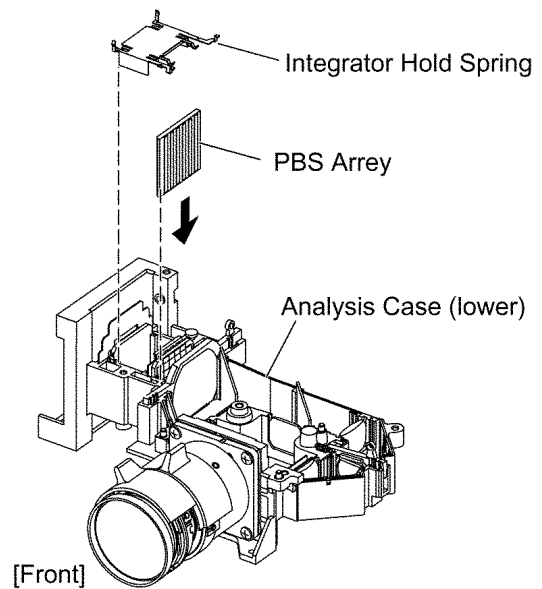
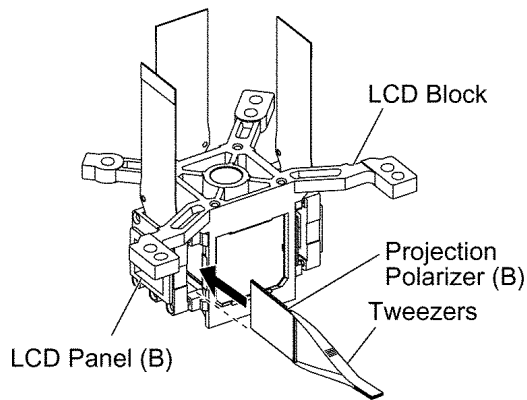
### Notes:

- Align the projection polarizer with the guides (lower, side) of LCD block.
- Be careful not to touch the surface of projection polarizer.
- Use tweezers.

- If the surface of projection polarizer is caught, it might be damaged.

Must catch the edge of projection polarizer with tweezers.

c. Press the adhesive part and secure the projection polarizer.



## 7.17. Replacement of PBS Array (Analysis Block)

1. Remove the analysis case (upper) according to the steps 1 through 3 in the section 7.15. "Replacement of Incidence Polarizer (R and B)".
2. Remove the PBS array.
3. Install new PBS array.

### Note:

- Be careful not to mistake the direction (inside and outside, upper and lower).
- Be careful not to touch the surface of PBS array.



## 8 Measurement and Adjustments

When the following components in this projector are replaced, adjustments are required. Adjust each item according to the table below.

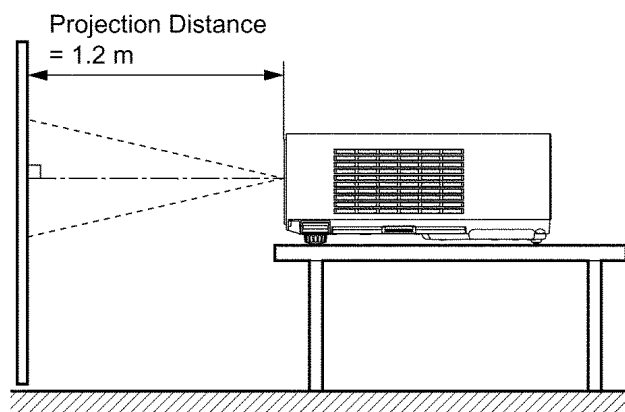
Adjustment Item	Replaced Component			Remarks
	LCD Panel (B)	LCD Block	A-P.C.Board	
Convergence Adjustment	Required	-	-	
Flicker Adjustment	Required	Required	Required	Using the adjustment mode
Input Level Adjustment	-	-	Required	Using Adjustment Tool

### 8.1. Cautions for Adjustment

- Never unplug the power cord until the power indicator on the projector illuminates red.
- To maintain and ensure safety, always use the designated components for replacement parts.
- If removing any clamps, lead wires or connectors, always place them back in their proper locations.
- Be careful not to damage the lead wires or components when using a soldering iron or similar tool.

### 8.2. Setting Before Adjustment

- Set up the projector to obtain the projection distance below.
- Turn the zoom ring of the projector to obtain the largest size of the picture.



### 8.3. Convergence Adjustment

Execute this adjustment when replacing the LCD panel (B) .

#### 8.3.1. Tools to be used

Service Kit (Part No. TZSH07026) : This kit is composed of 3 extension flexible cables.

##### Note:

- Consult your dealer or Authorized Service Center for the service kit.

#### 8.3.2. Preparation

1. Loosen 2 screws fixing the panel adjuster and 2 screws fixing the panel attachment, then tighten the 4 screws temporarily just until the LCD panel can be shifted by your fingers.

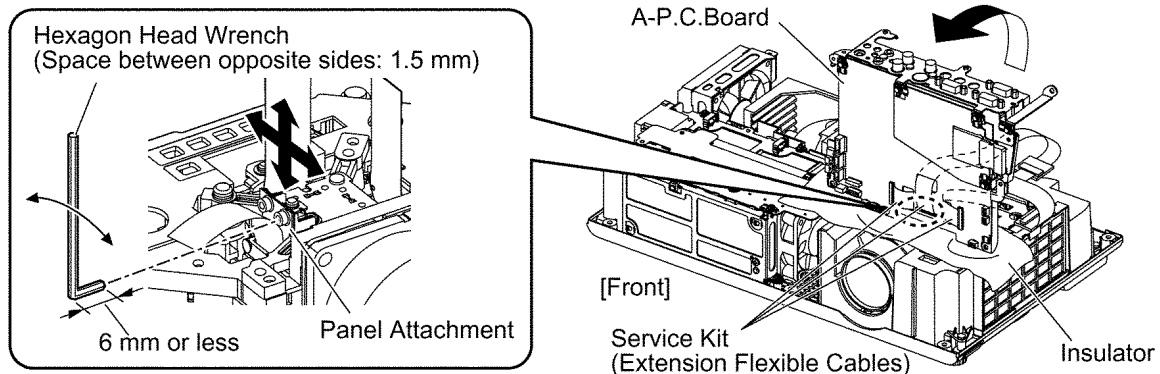
##### Note:

- See figures in the section 7.13. "Replacement of LCD Panel (B)" for 2 screws fixing the panel adjuster and 2 screws fixing the panel attachment.
2. Reassemble the projector in the reverse order of disassembling, but leave the upper case and the screws fixing the A-P.C.Board block as they are removed.
  3. Connect the service kit (extension flexible cables).
    - Each flexible cable of LCD Panels (R/G/B) - Connectors (A1/A2/A3) on A-P.C.Board

4. Covering with an insulator (cloth or the like) to prevent a short circuit, set the A-P.C.Board block on the main unit.

**Note:**

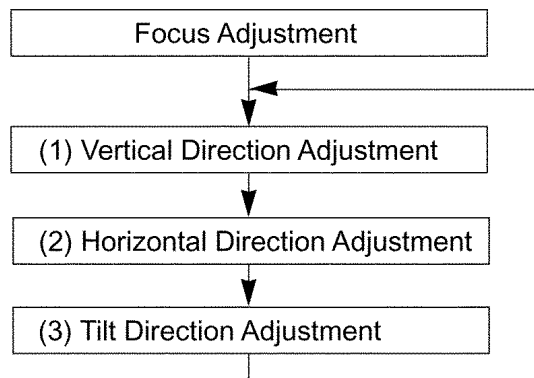
- Handle with care not to apply external force to connecting parts which connect the main unit and A-P.C.Board.



### 8.3.3. Adjustment Procedure

Prepare 2 pieces of thick black paper (23 mm × 100 mm) that can be shaded.

- Cover and shade LCD panels (R) and (G) with the paper.
1. Display the green crosshatch pattern and adjust the lens focus.
  2. Display green and blue crosshatch patterns.
  3. Adjust focus by shifting the panel adjuster for LCD panel (B) back and forth, then tighten the 2 screws.
  4. Adjust the LCD panel (B) position so that the vertical center of blue crosshatch pattern is overlapped with the vertical center of green crosshatch pattern.
  5. Adjust the LCD panel (B) position so that the horizontal center of blue crosshatch pattern is overlapped with the horizontal center of green crosshatch pattern.
  6. Correct the tilt of the blue crosshatch pattern by adjusting the LCD panel (B) position.
  7. Display green, red and blue crosshatch patterns and confirm the convergence. If it is necessary, fine adjust the convergence so that the blue crosshatch pattern is overlapped with green one.



Repeat steps (1) to (3) until the green and blue crosshatch patterns merge into a cyan pattern.

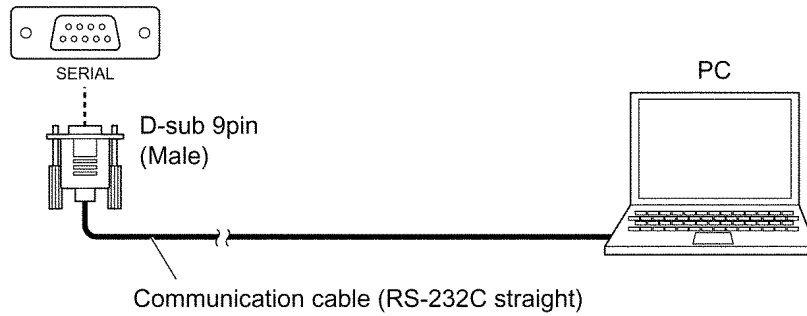
8. After the adjustment, reassemble the projector according to the steps 8 in the section 7.13. "Replacement of LCD Panel (B)".

## 8.4. Software for Adjustment

### 8.4.1. Outline

- This projector needs computer-aided adjustments.
- After the software adjustments, this projector must be turned off and on again to memorize the settings.
- Connect the cable between the projector and a PC as shown below.
- Updating the software will change the version number.

〈Back connector panel of the projector〉



## 8.4.2. Operating Procedure

1. Run software program by the keyboard entry.

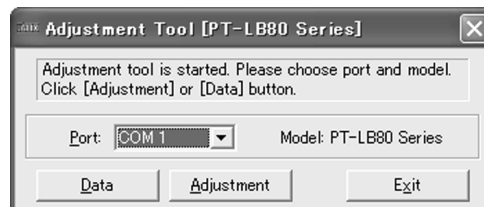
**Note:**

- Use the software program as below.

Adjustment Tool [PT-LB80, LW80 Series]

2. The first menu is Port selection menu.
3. Adjust the projector by selecting the necessary item from the menu in each stage.

## 8.4.3. Port Selection Menu



Select the applying item with the list box and click "Data" or "Adjustment".

### 8.4.3.1. Explanation of Buttons

**Port:**

Port name of PC which connects with the projector

**Data:**

Displays the data setting menu.

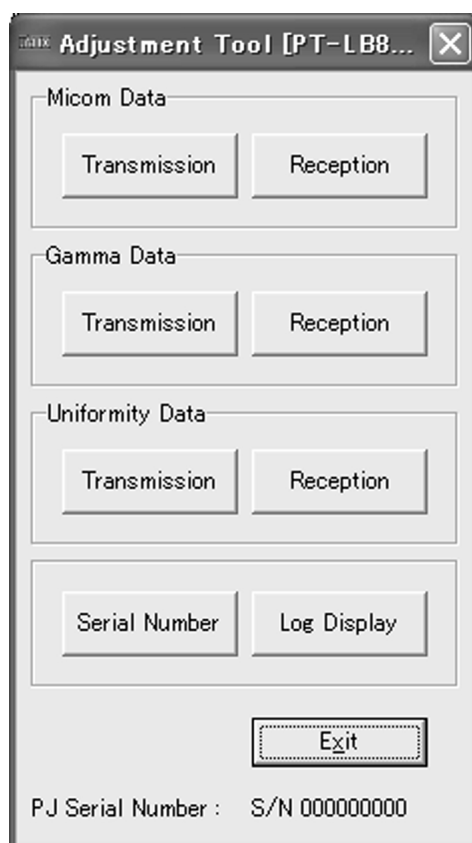
**Adjustment:**

Displays the adjustment menu.

**Exit:**

Exits this application.

### 8.4.4. Data Setting Menu



#### 8.4.4.1. Explanation of Buttons

##### Micom Data Transmission:

Reads the microcomputer data from the file and transmits it to the projector.

##### Micom Data Reception:

Receives the microcomputer data from the projector and writes it in the file.

##### Gamma Data Transmission:

Reads the gamma data from the file and transmits it to the projector.

##### Gamma Data Reception:

Receives the gamma data from the projector and writes it in the file.

##### Uniformity Data Transmission:

Reads the color unevenness correction data from the file and transmits it to the projector.

##### Uniformity Data Reception:

Receives the color unevenness correction data from the projector and writes it in the file.

##### Serial Number

Displays the serial number setting menu.

##### Log Display

Displays the log receiving menu.

##### Exit:

Exits this application.

#### 8.4.4.2. Receiving and transmitting of the data

Click a target button and specify a file name.

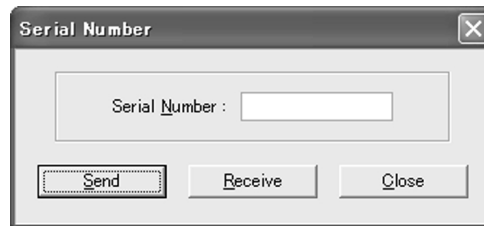
#### 8.4.4.3. Setting the Serial Number

Set the serial number if the A-P.C.Board is replaced and the product serial number disappears.

##### Note:

- Set the projector into standby mode (POWER indicator on the projector illuminated red), and execute the procedure in

## 8.4.4.3.3.

**8.4.4.3.1. Setting Menu****8.4.4.3.2. Explanation of Buttons****Send:**

Sends and writes the serial number to the projector.

**Receive:**

Receives the serial number from the projector.

**Close:**

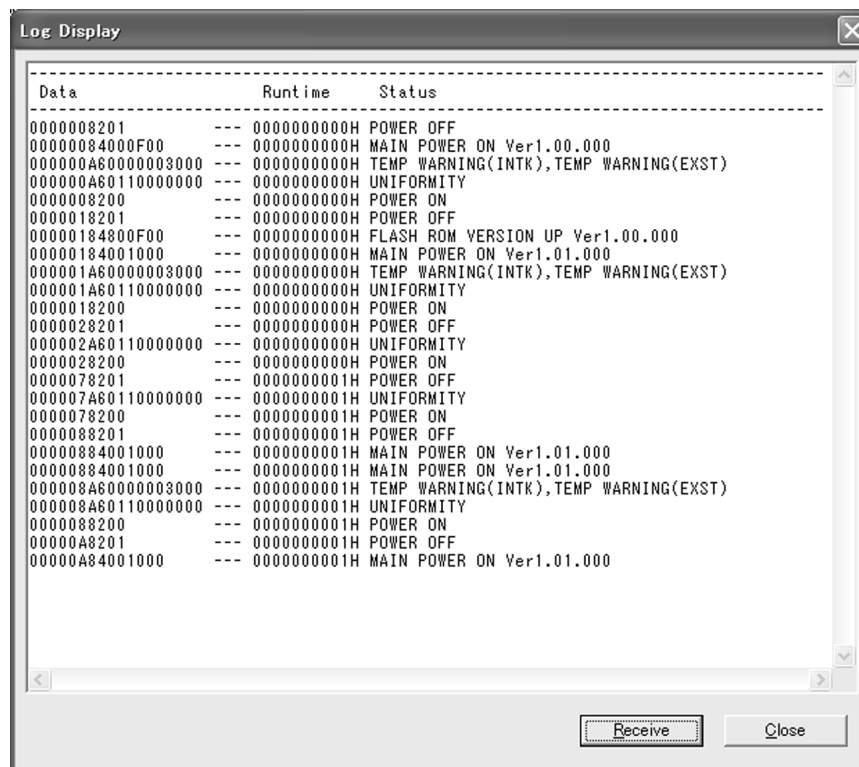
Closes this dialog.

**8.4.4.3.3. Setting Procedure**

1. Display the serial number setting menu.
2. Click "Send" button after inputting the serial number.

**8.4.4.4. Receiving Log Information**

Log information on errors etc. that occurred in this projector can be accessed.

**8.4.4.4.1. Receiving Menu****8.4.4.4.2. Explanation of Buttons****Receive:**

Receives the log information.

**Close:**

Closes this display.

### 8.4.4.4.3. Receiving Procedure

1. Display the log receiving menu.
2. Click "Receive" button.

**Note:**

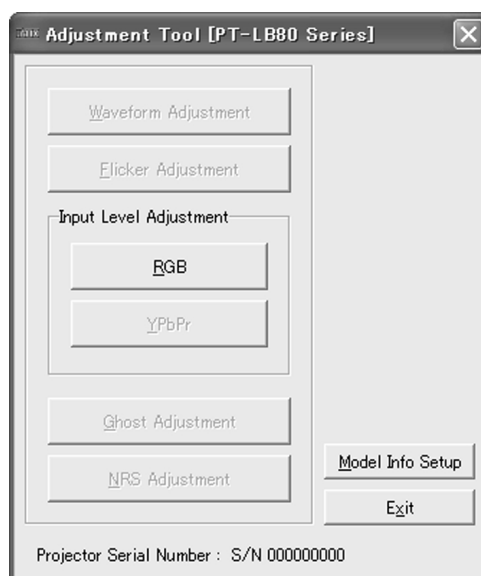
- The state displayed in log information and the meaning are as follows.

Displayed Status	Meaning
POWER ON	Power ON
POWER OFF	Power OFF
LAMP CHANGE	Lamp replacement
MAIN POWER ON	Main power ON
FLASH ROM VERSION UP	Flash ROM rewriting
INTERNAL ERROR	Internal error
FAN ERROR	Fan error (Stop)
TEMP ERROR(INTK)	Intake air temperature error
TEMP ERROR(EXST)	Exhaust air temperature error
RUNTIME OVER	Lamp cumulative usage time excess
LAMP ERROR	Lamp error (Lamp unit is damaged.)
SENSOR ERROR(INTK)	Intake air thermosensor is disconnected.
SENSOR ERROR(EXST)	Exhaust air thermosensor is disconnected.
TEMP WARNING(INTK)	Intake air temperature warning
TEMP WARNING(EXST)	Exhaust air temperature warning
RUNTIME WARNING	Lamp cumulative usage time warning

Error details

Displayed Status	Meaning
SS HANGUP	Momentary halt
S6 HANGUP	S6 hangs up
GAMMA	No gamma data
UNIFORMITY	No color unevenness correction data
FAN(IN RB)	Intake fan (R, B) stop
FAN(PWR)	Power fan stop
FAN(IN G)	Intake fan (G) stop
FAN(EXST)	Exhaust fan stop
FAN(LAMP)	Lamp fan stop
LAMP	Lamp unit is damaged.

### 8.4.5. Adjustment Menu



### 8.4.5.1. Explanation of Buttons

#### Input Level Adjustment RGB:

Displays the RGB input level adjustment menu.

#### Model Info Setup

Displays the model information setup menu.

#### Exit:

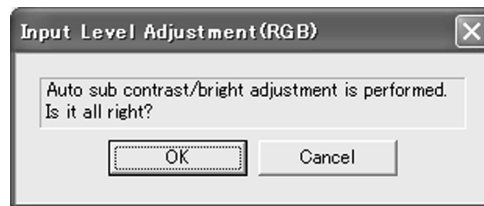
Exits this application.

## 8.5. Flicker Adjustment

According to the procedure of chapter 5 "Flicker Adjustment Mode", minimize the flicker.

## 8.6. Input Level Adjustment

### 8.6.1. Adjustment Menu



### 8.6.2. Explanation of Buttons

#### OK:

Executes automatic sub contrast and sub brightness adjustments, then closes this dialog.

#### Cancel:

Cancels this menu.

### 8.6.3. Equipment to be used

PC, RGB Signal Generator, Software for Adjustment

### 8.6.4. Adjustment Procedure

1. Display Input Level Adjustment(RGB) menu.
2. Input a window pattern signal to COMPUTER 1 IN connector.

#### Note:

- Use approx. 15 % window pattern as follows.  
 Black background (screen width) : White window width = 2 : 1  
 Black background (screen height) : White window height = 3 : 1
- Use the window pattern of XGA (1 024 × 768).

3. Click the OK button.

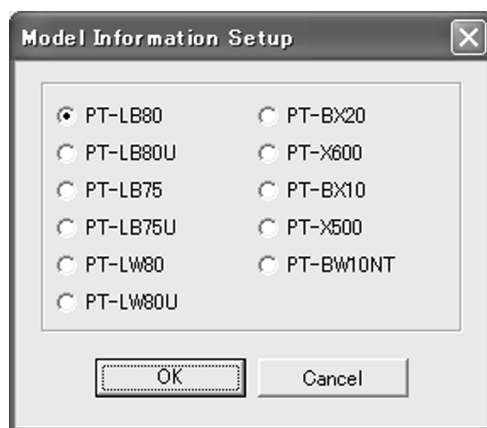
## 8.7. Model Information Setup

Set the model information when the A-P.C.Board is replaced.

#### Note:

- Set the projector into standby mode (POWER indicator on the projector illuminated red), and execute the procedure in 8.7.4.

### 8.7.1. Adjustment Menu



### 8.7.2. Explanation of Buttons

**Radio buttons:**

Selects the corresponding model name.

**OK:**

Executes model information setup, then closes this dialog.

**Cancel:**

Cancels this menu.

### 8.7.3. Equipment to be used

PC, Software for Adjustment

### 8.7.4. Setup Procedure

1. Display Model Information Setup menu.
2. Select the corresponding model name.
3. Click the OK button.



## 9 Troubleshooting

The letters in the left of the inspection items indicate the P.C.Boards or Modules related to their respective descriptions.

Note: A

The letter of the alphabet indicates the P.C.Board or Module name.

(Example) A: A-P.C.Board, B: B-Module

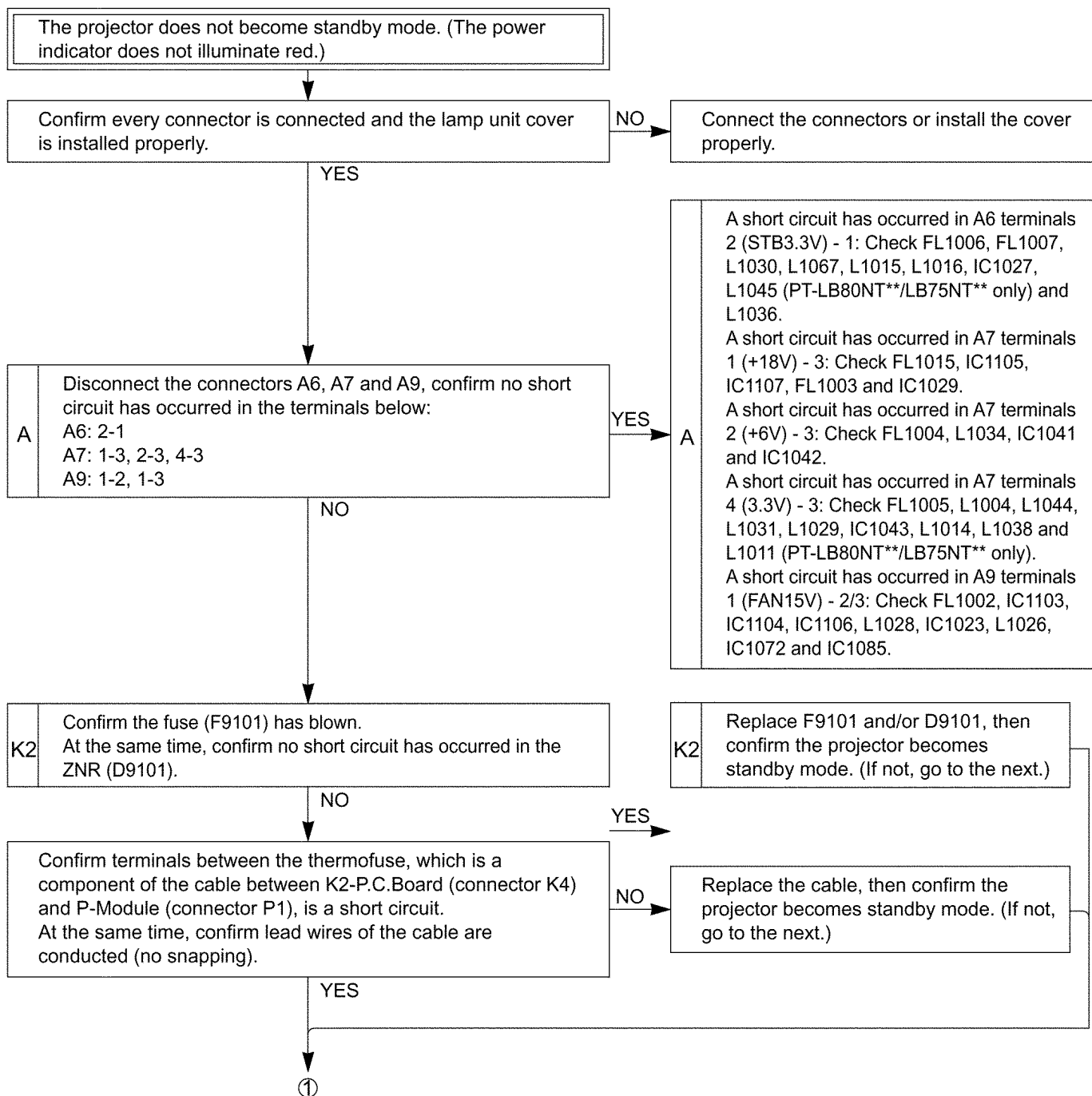
If replacing A-P.C.Board (assembly), read the ROM data from the old P.C.Board and write it in the new one according to the section 8.4. "Software for Adjustment". At this time, if the readout from the old P.C.Board does not succeed, remove IC1011 and IC1017 from the old P.C.Board and install them on the new one. Then, execute the self-check according to the chapter 3. "Self-Check Mode", and confirm "G SAVED" and "U-SAVED" display "OK".

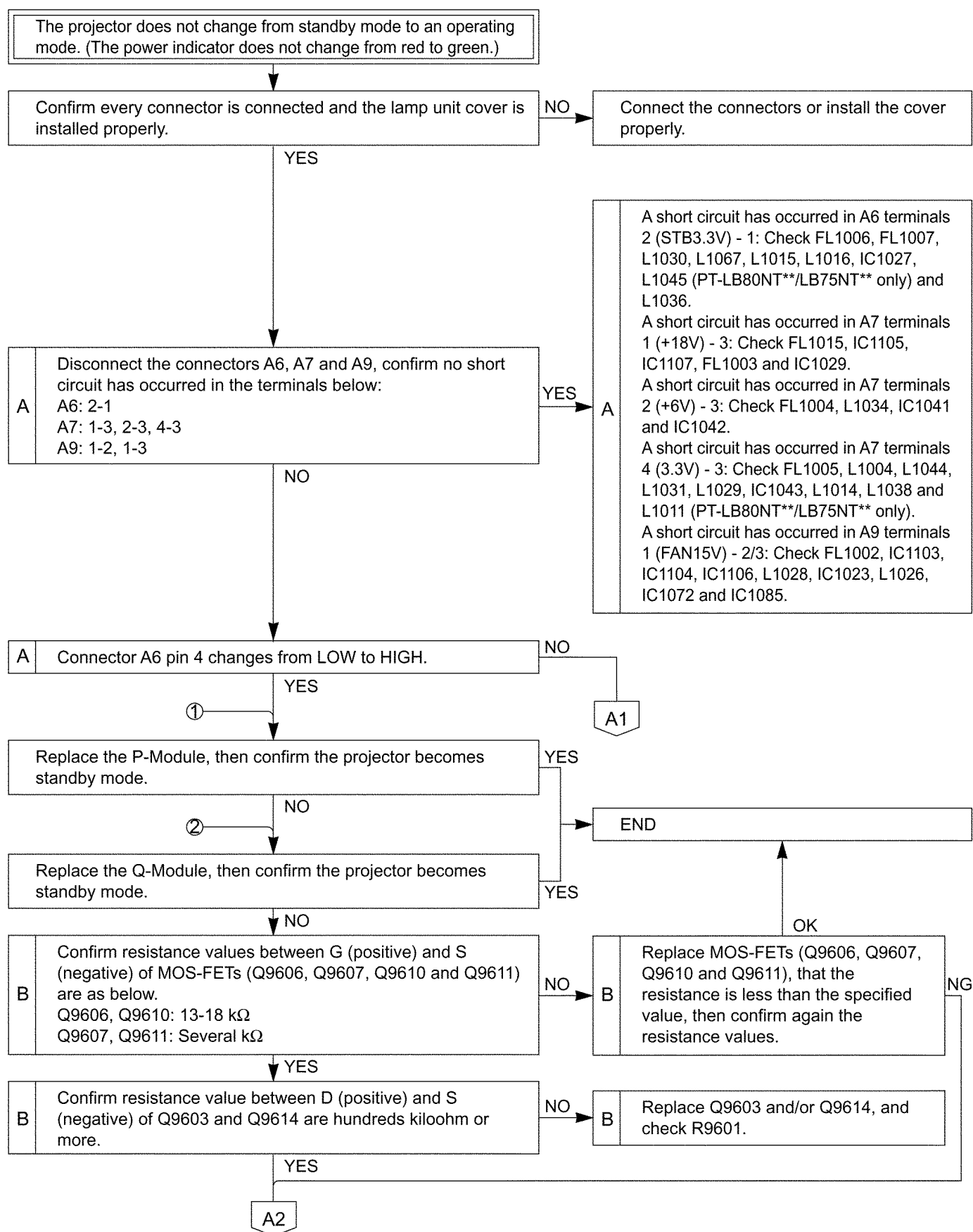
If replacing A-P.C.Board (assembly), minimize the flicker according to the chapter 5. "Flicker Adjustment Mode".

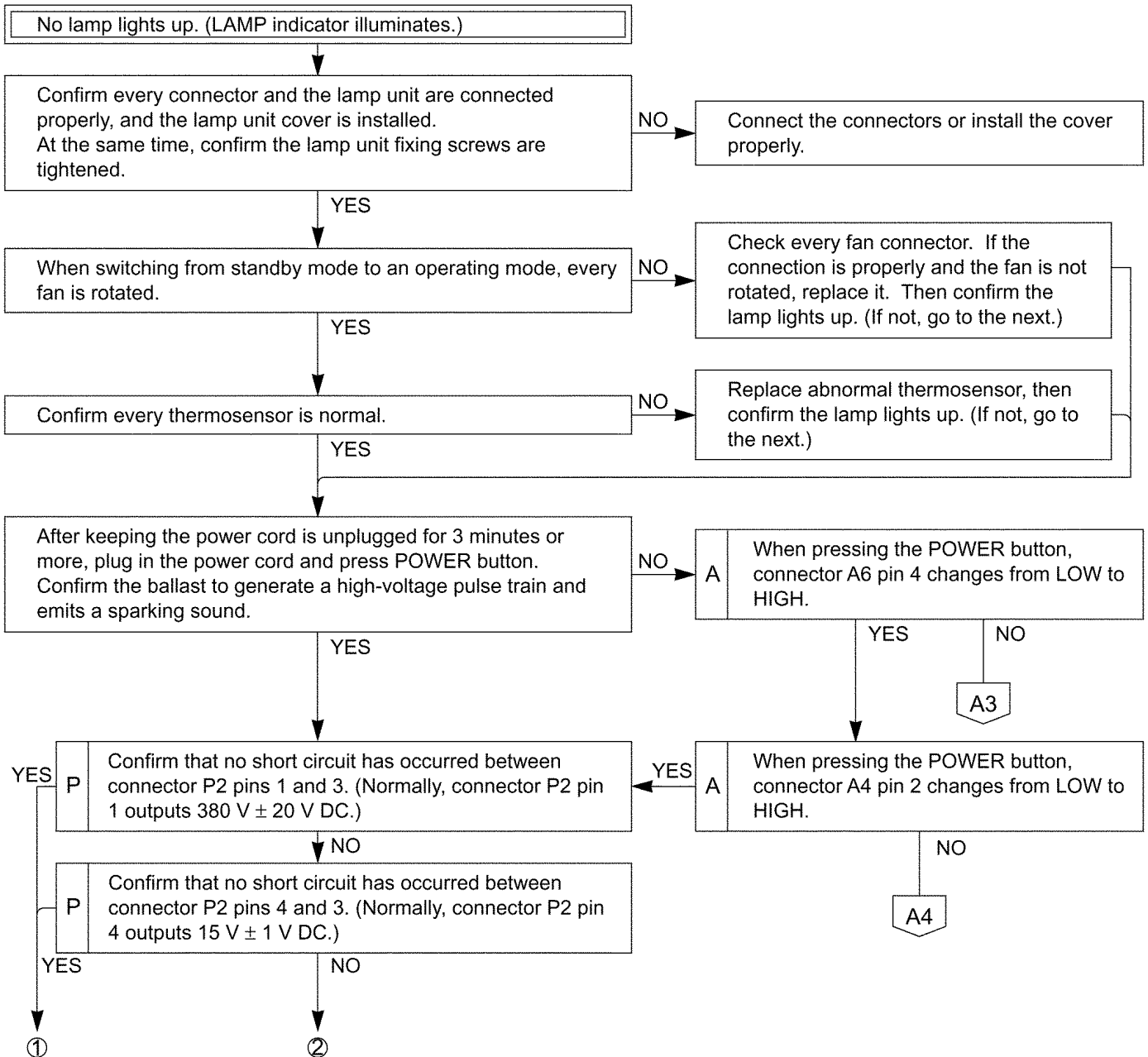
If replacing A-P.C.Board (assembly), adjust the RGB Input Level according to the chapter 8.6. "Input Level Adjustment".

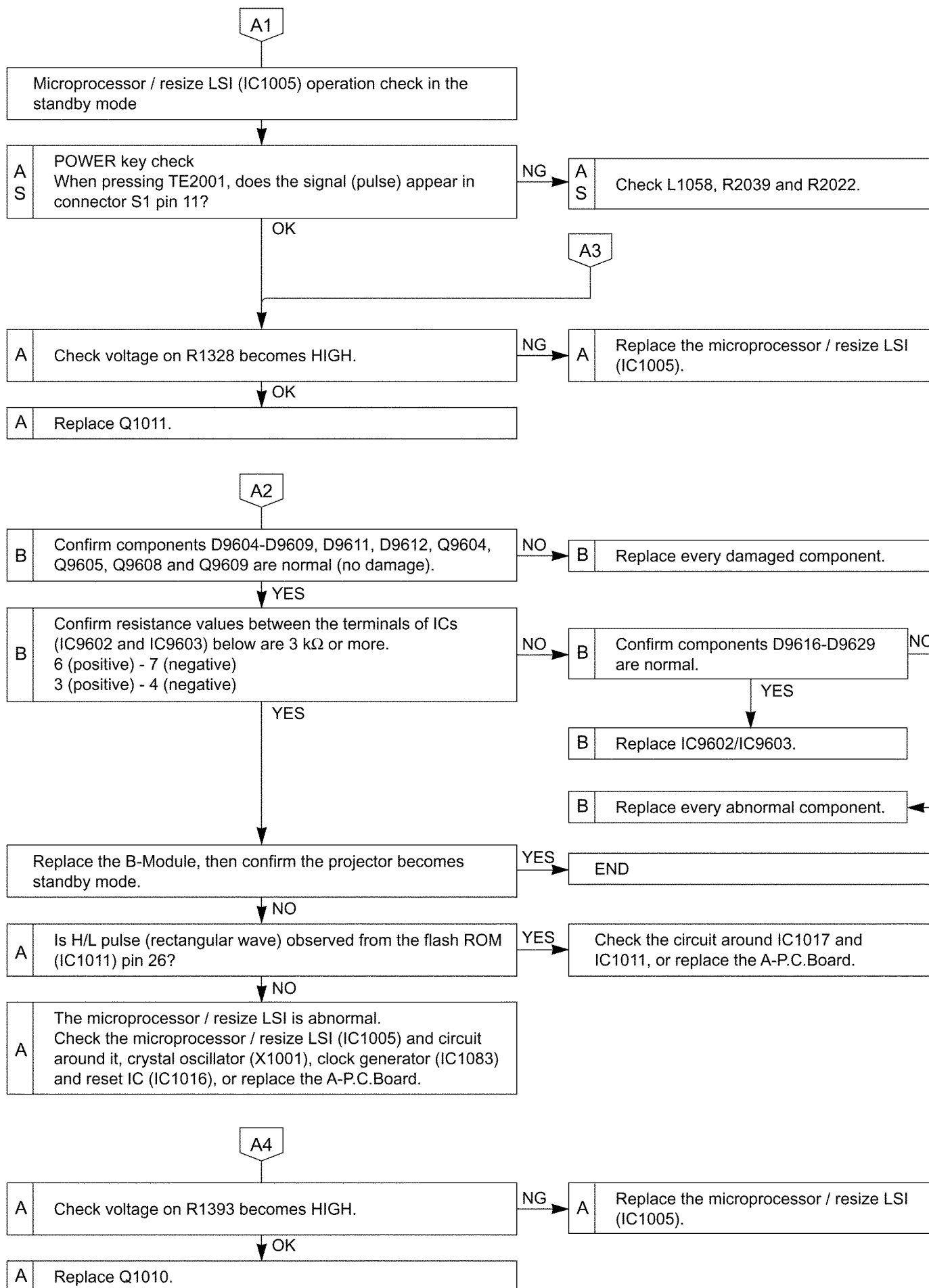
If replacing A-P.C.Board (assembly), set Model Information according to the chapter 8.7. "Model Information Setup".

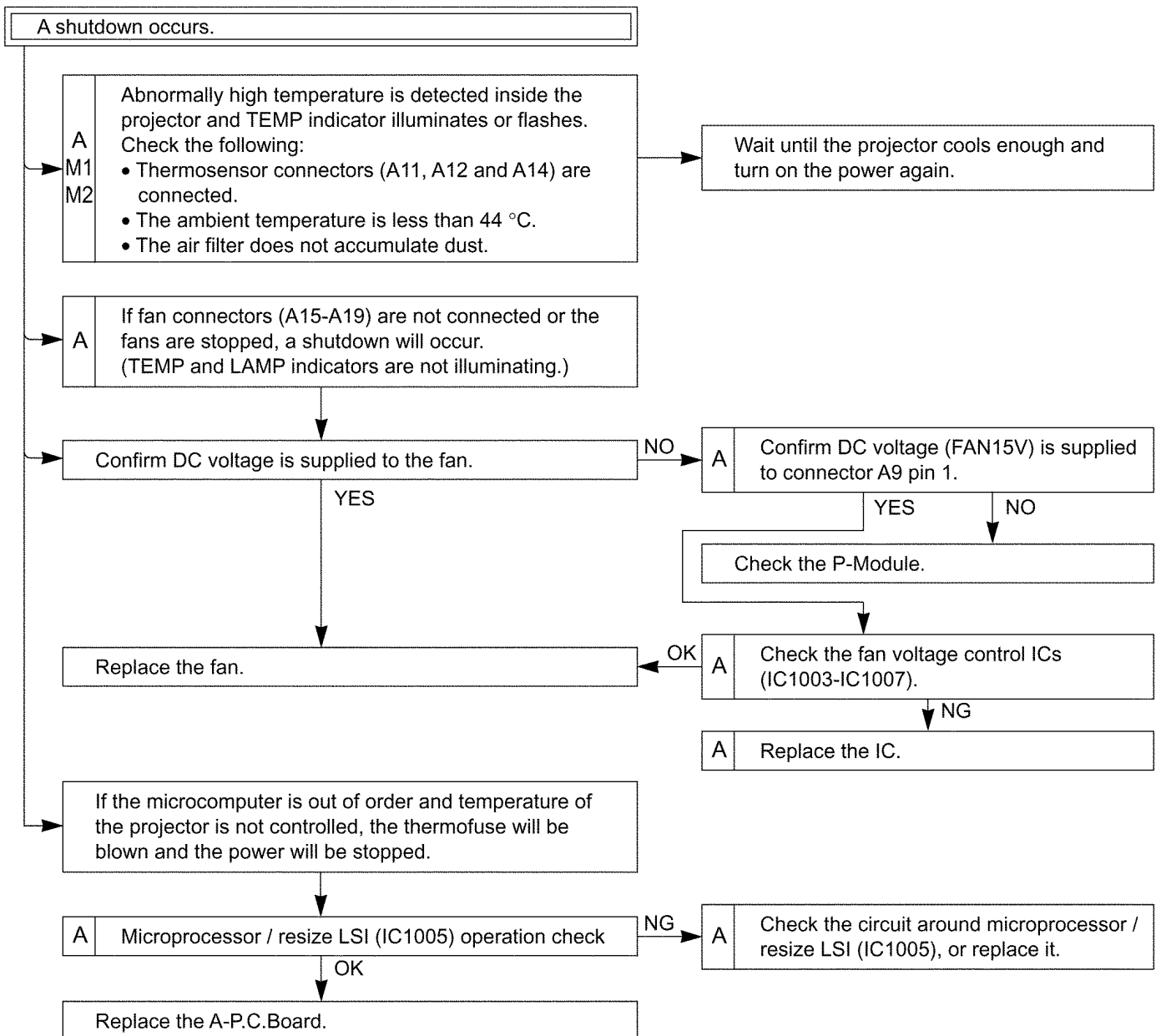
When Wireless LAN card is replaced, explain that to the customer because the MAC (Media Access Control) address is changed.

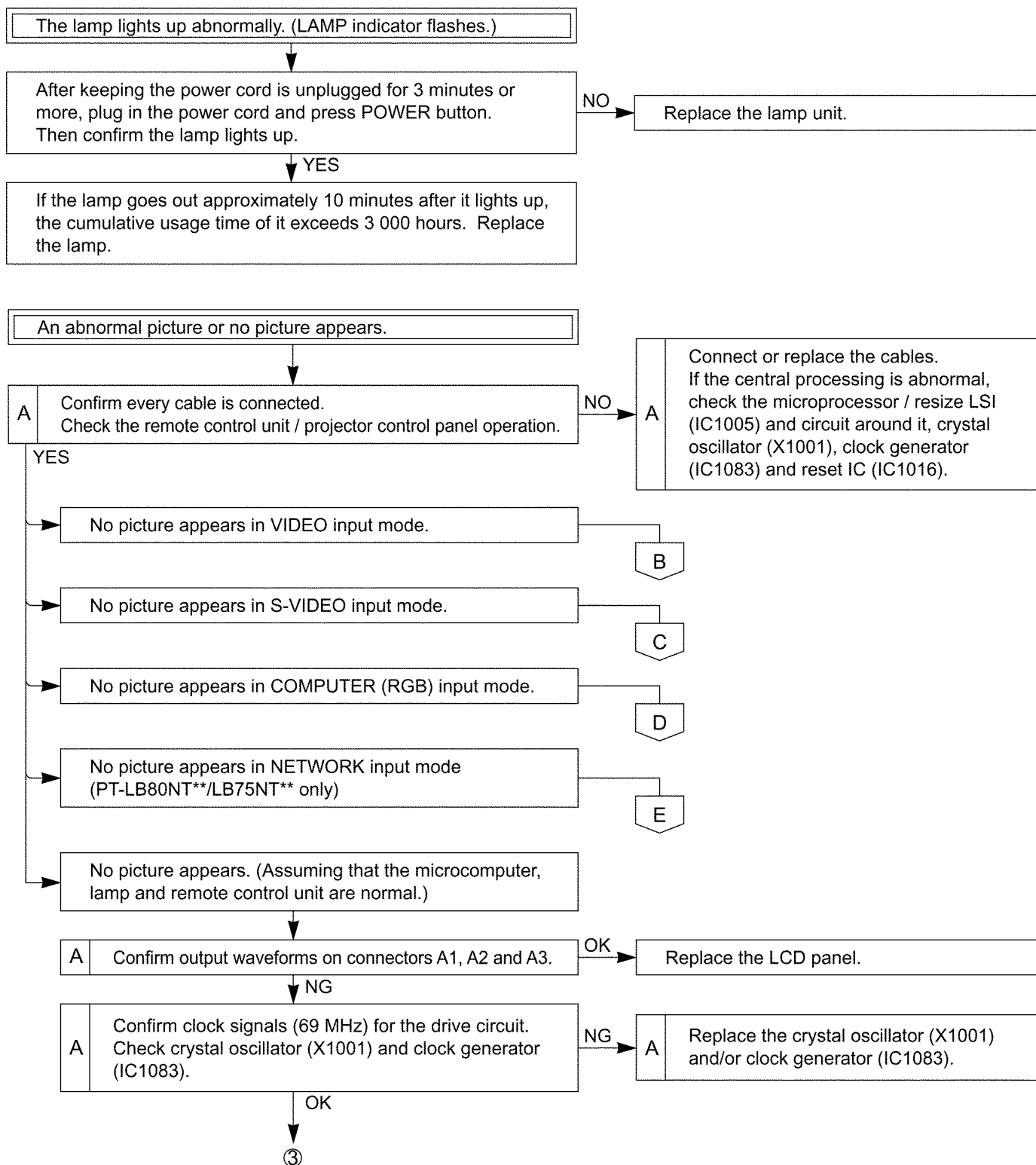


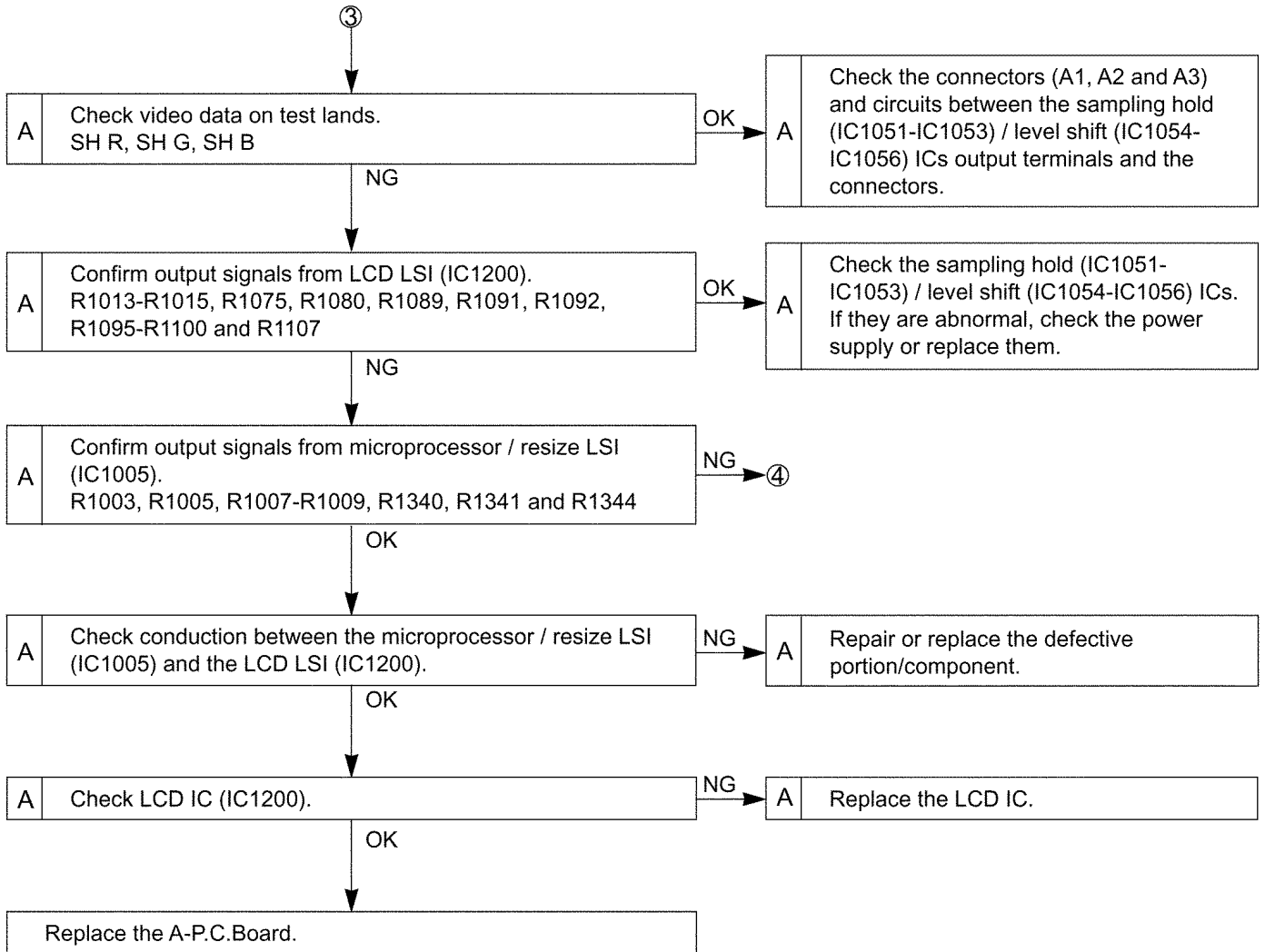


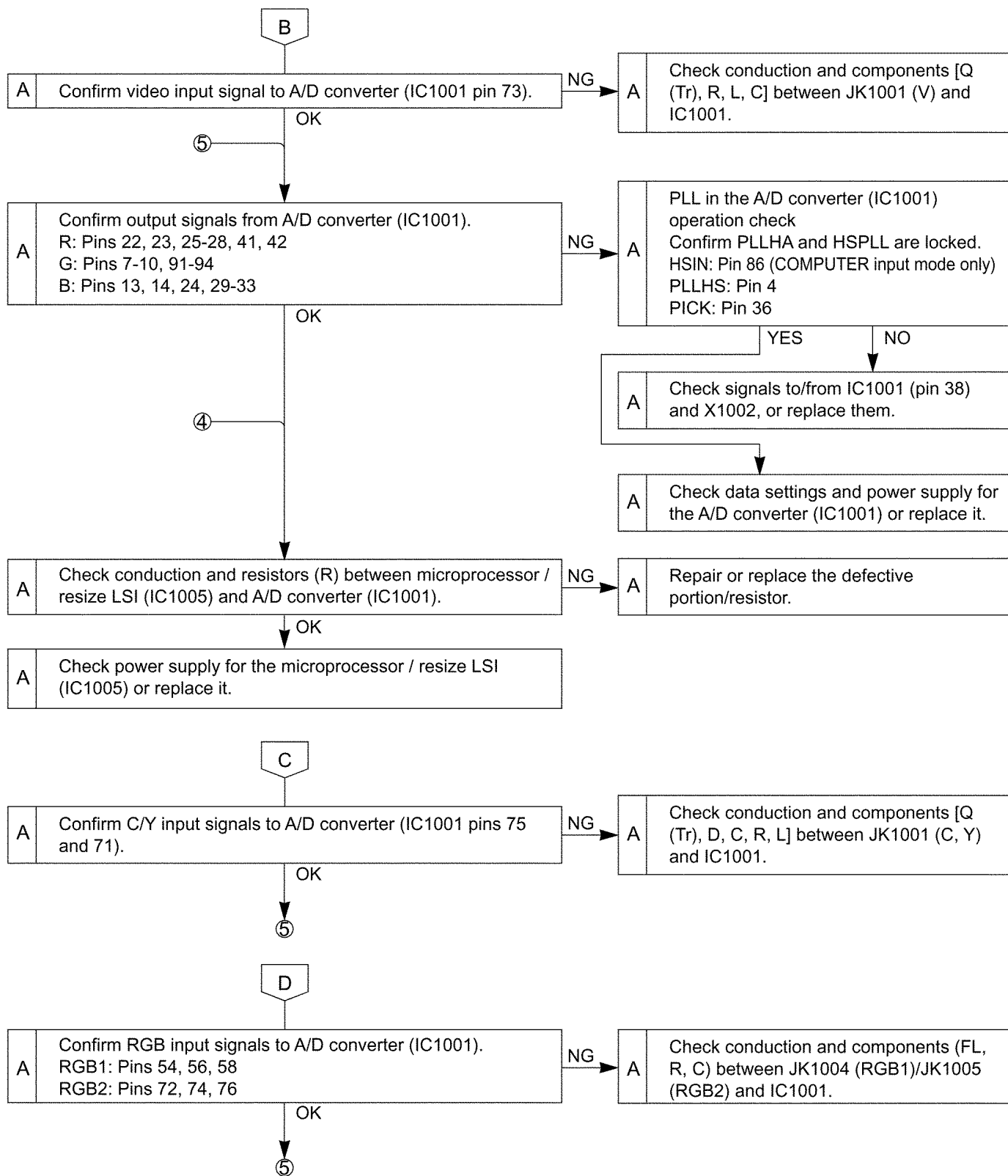




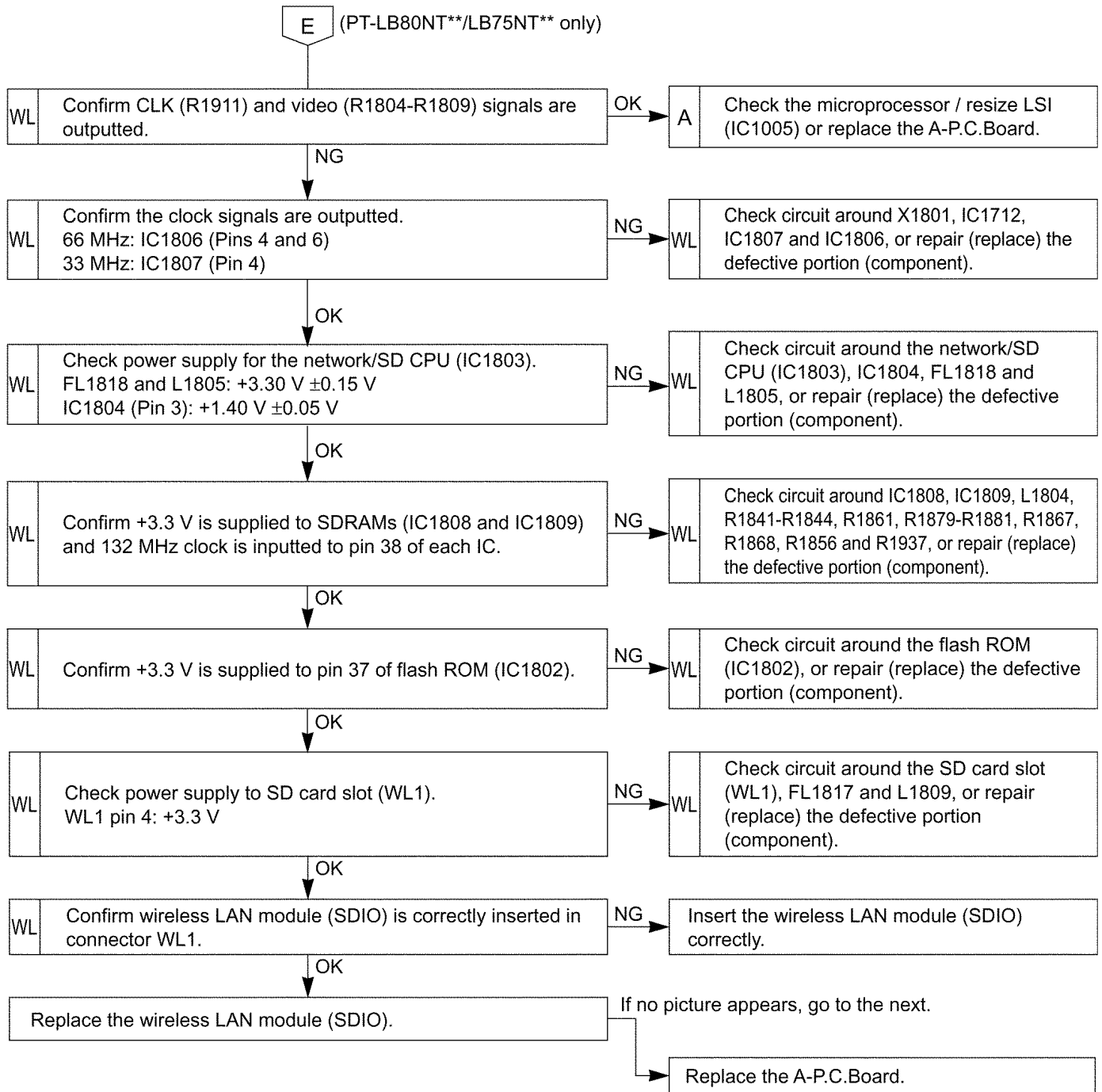


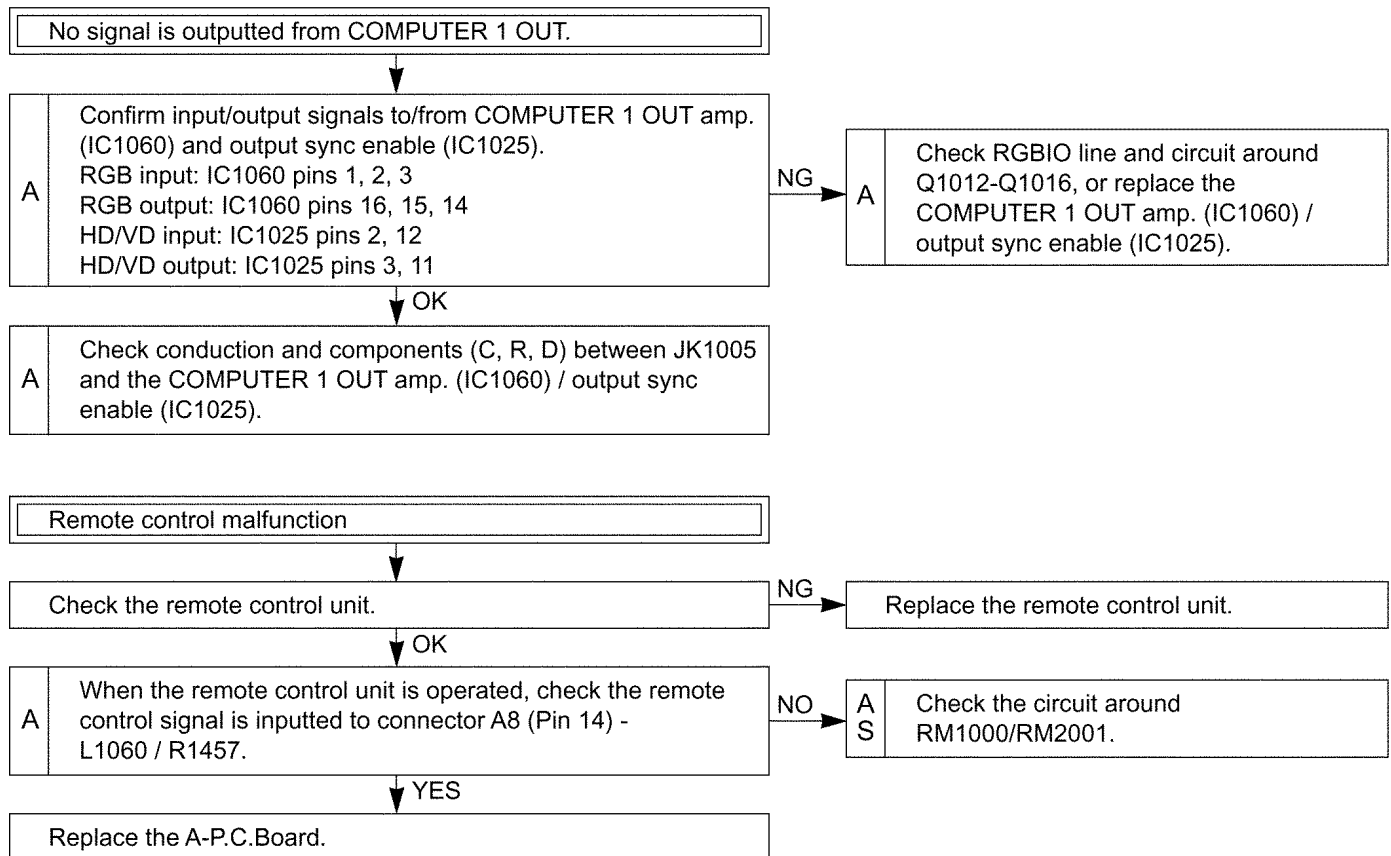


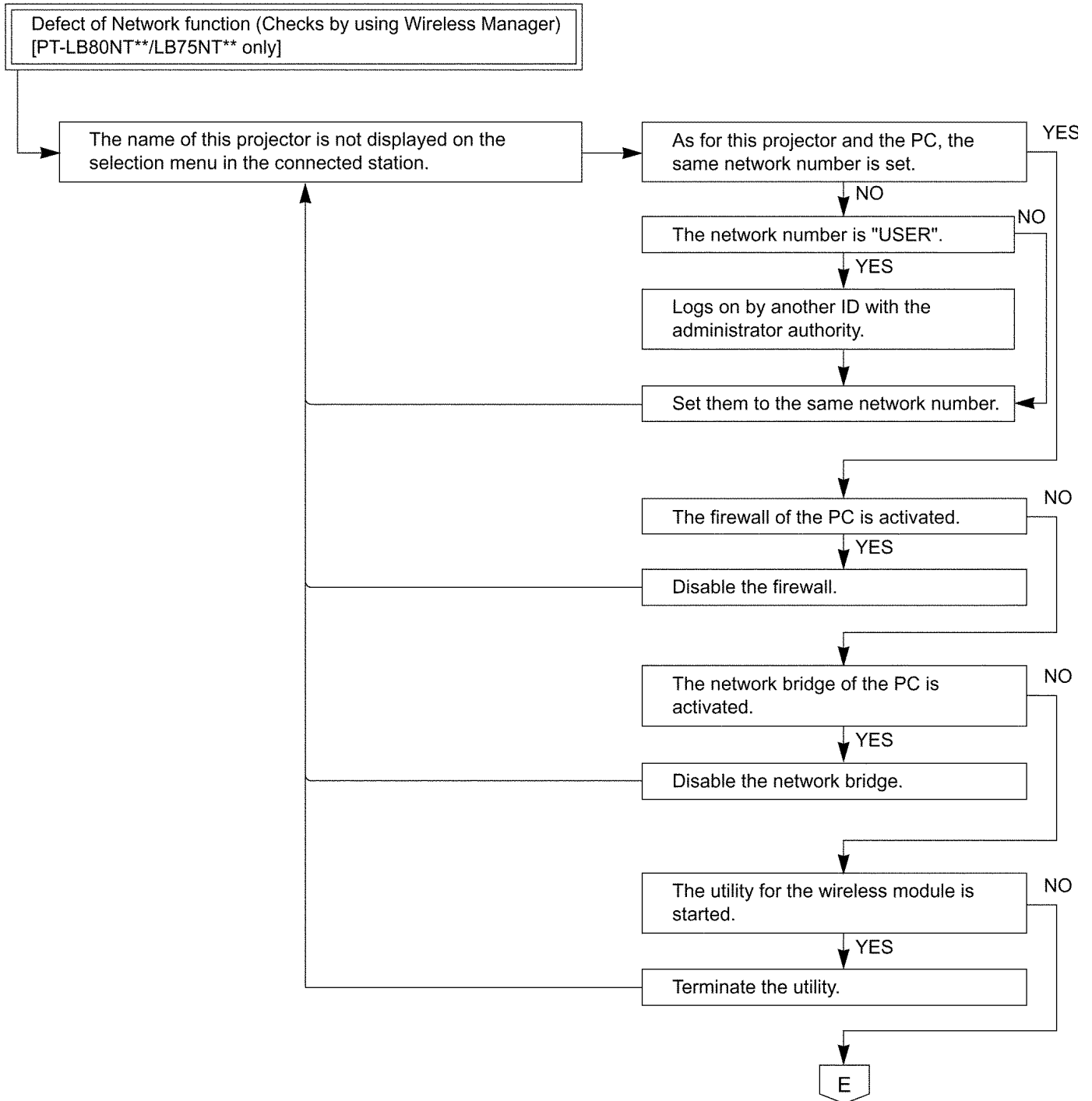






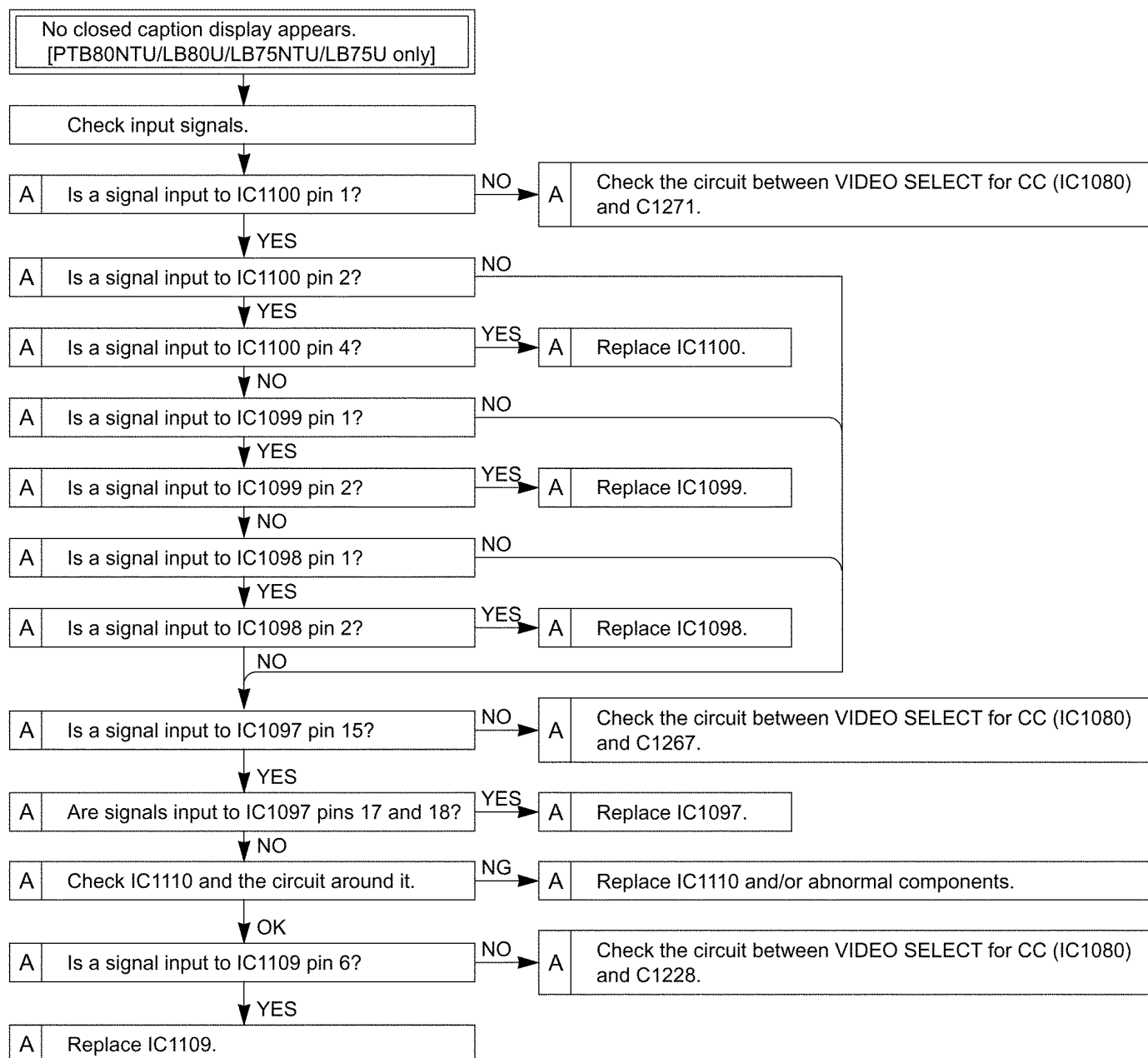






\* Note for software update

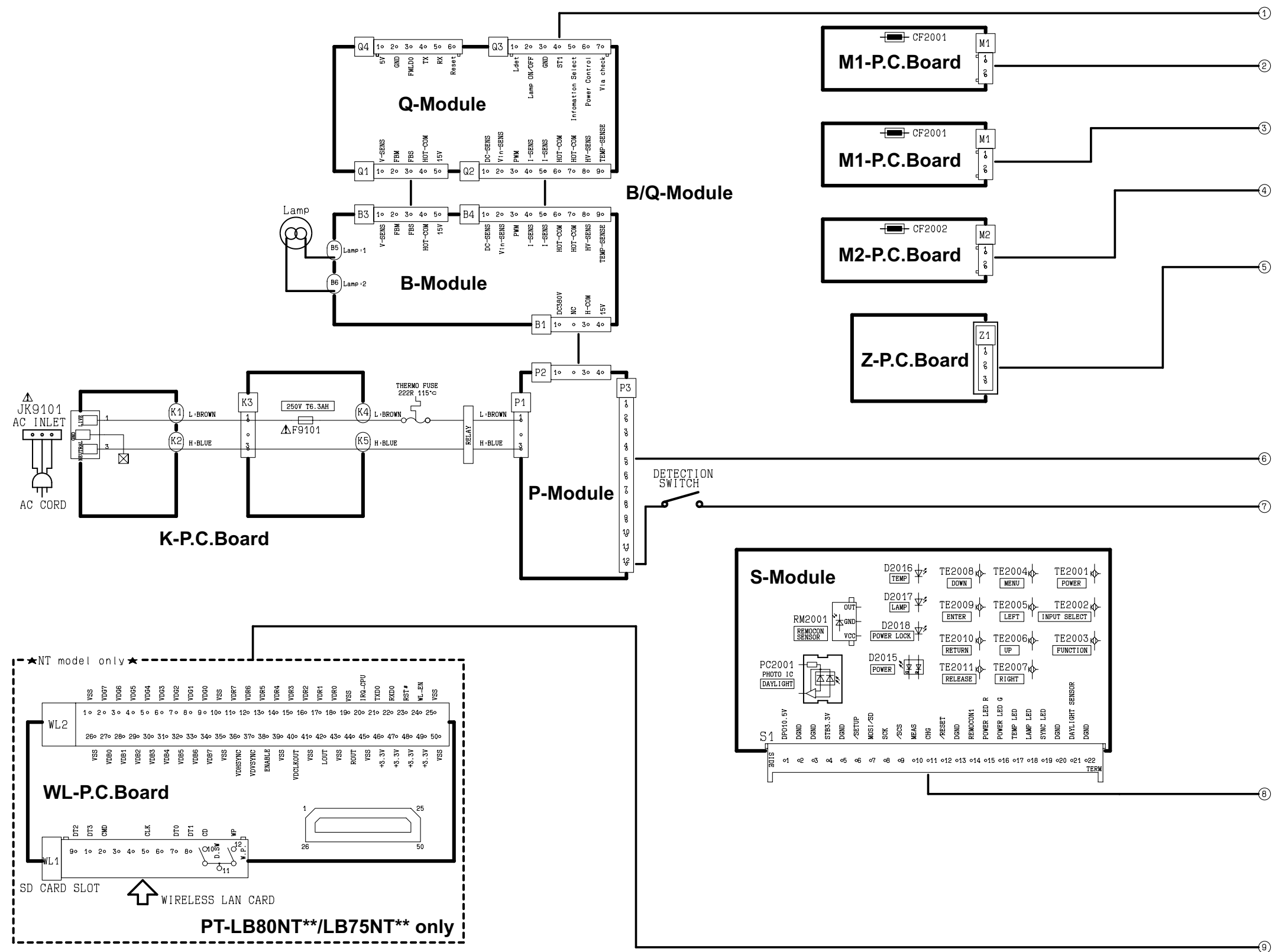
After completing the software rewriting, confirm rewriting is correctly done by confirming the software version on Self Check Display (Refer to the section 3.2. "Self Check Display and Contents").



# 10 Interconnection Block Diagram

## 10.1. Interconnection Block Diagram (1/2)

Interconnection Block Diagram (1/2)

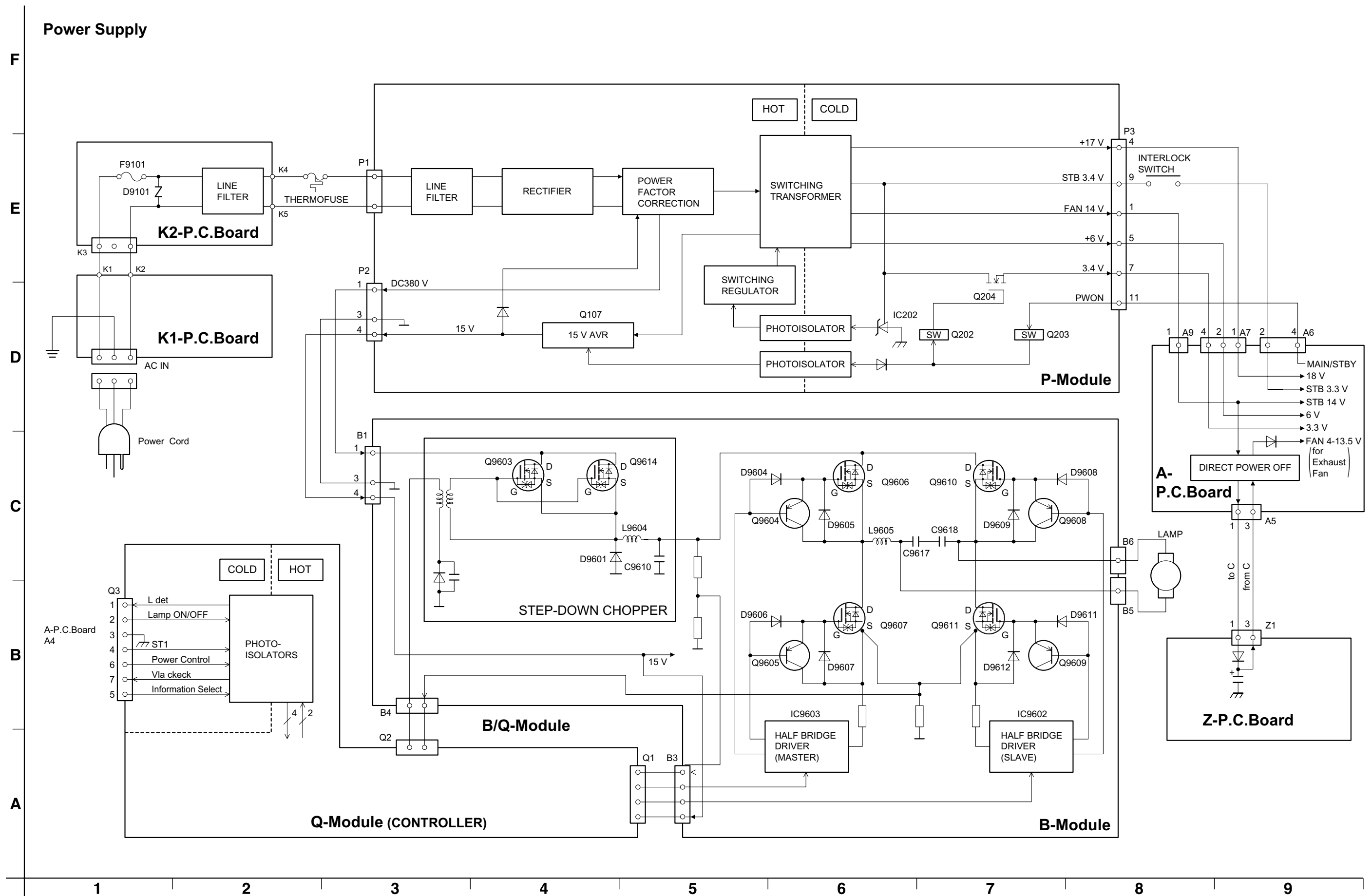


**A**



# 11 Block Diagram

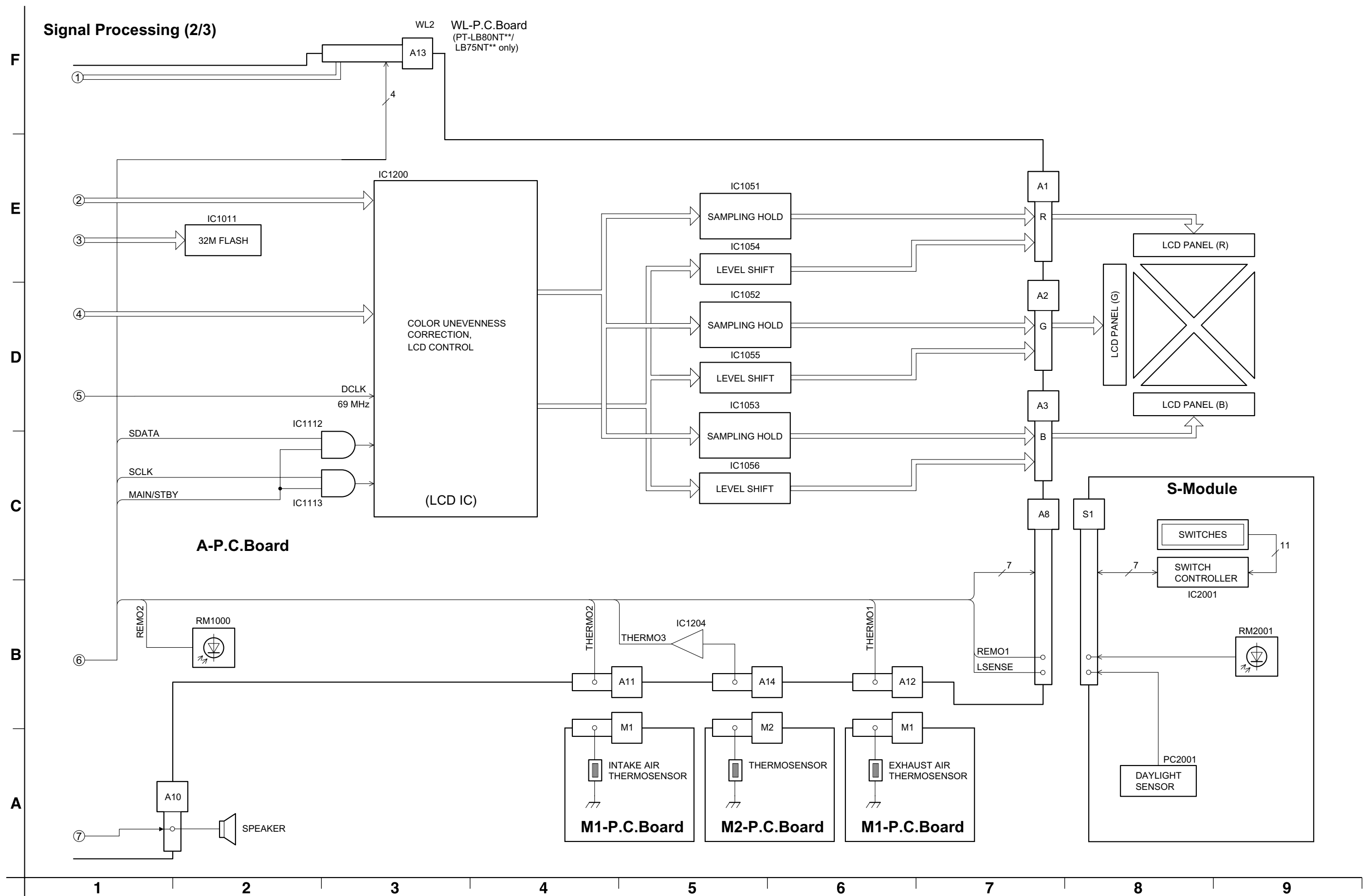
## 11.1. Power Supply



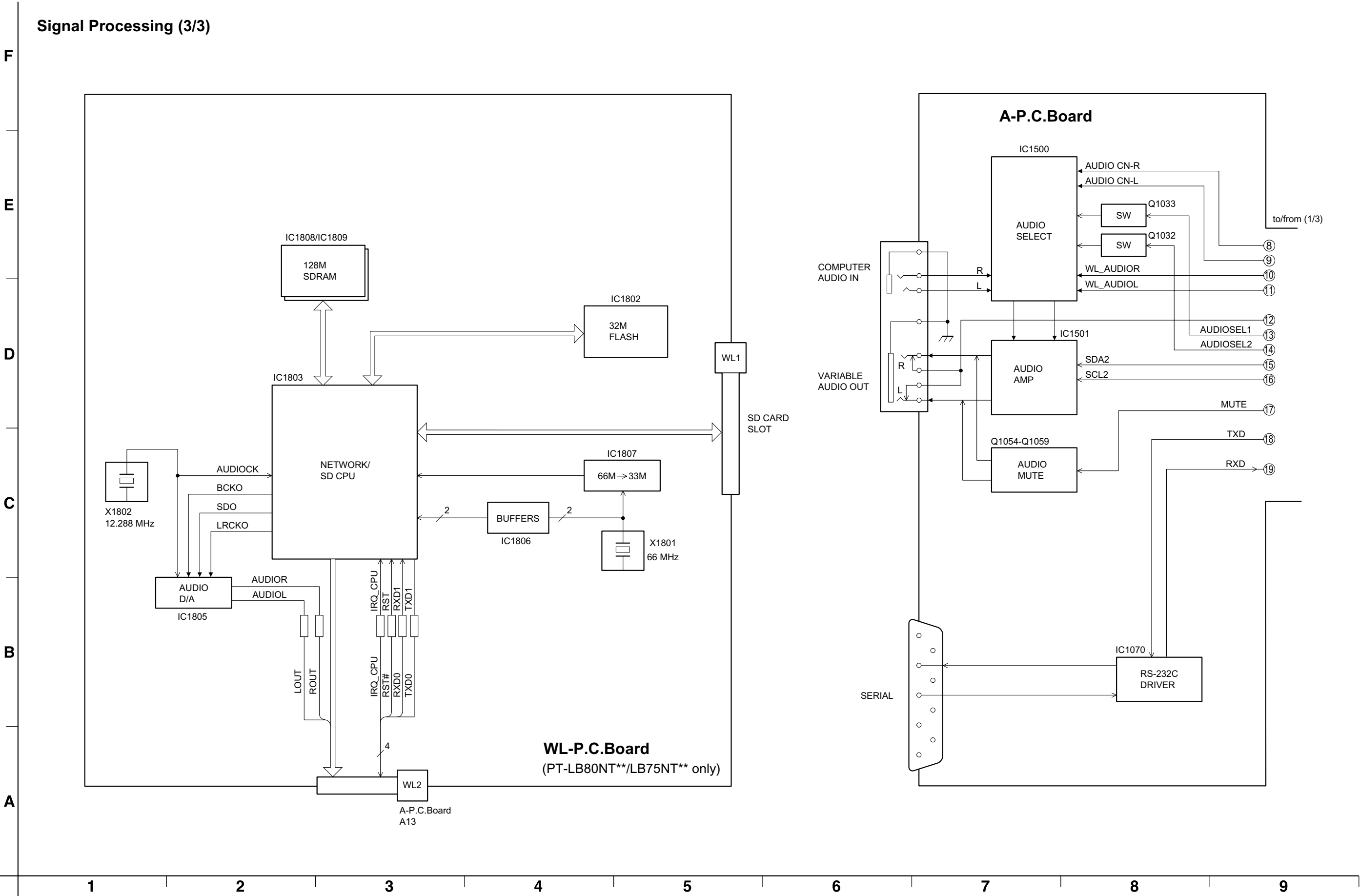




### 11.3. Signal Processing (2/3)



11.4. Signal Processing (3/3)



# 12 Schematic Diagram


## Schematic Diagram for Model PT-LB80NTU, PT-LB80U, PT-LB75NTU, PT-LB75U

IMPORTANT SAFETY NOTICE

THE SHADED AREA ON THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM FIRE AND ELECTRICAL SHOCK HAZARDS. WHEN SERVICING, IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE SHADED AREAS OF THE SCHEMATIC.

## Schematic Diagram for Model PT-LB80NTE/EA, PT-LB80E/EA, PT-LB75NTE/EA, PT-LB75E/EA

Important Safety Notice

Components identified by the international symbol  have special characteristics important for safety. When replacing any of these components, use only the manufacturer's specified ones.









Notes:

1. Resistor

All the resistors are carbon 1/4W resistors, unless marked as follows: The unit of resistance is an OHM [Ω] (K=1 000 M=1 000 000).

-  : Nonflammable
-  : Metal Oxide
-  : Solid
-  : Metal Film
-  : Wire Wound
-  : Fuse


2. Capacitor

-  : Temperature Compensation
-  : Electrolytic
-  : Polyester
-  : Bipolar
-  : Metalized Polyester
-  : Dipped Tantalum
-  : Polypropylene
-  : Z-Type

3. Coil

The unit of inductance is a H, unless otherwise noted.





4. Test Point

-  : Test Point

5. Voltage Measurement

The voltage is measured by an electronic voltmeter receiving the colorbar signal when all the customer's controls are set to the standard condition.

6. Color code for the links between diagrams and circuit boards

From/To		To/From	Color code
Block diagram		Schematic diagram	Magenta
Schematic diagram		Schematic diagram	Green
Schematic diagram		Circuit boards	Yellow
Schematic diagram		Waveforms	Cyan (Light blue)

7. HOT and COLD indications

The power circuit board contains a circuit area using a separate power supply to isolate the ground connection. The circuit is defined by HOT and COLD indications in the schematic diagram. Take the precautions below:

8. This schematic diagram is the latest at the time of printing and the subject to change without notice.

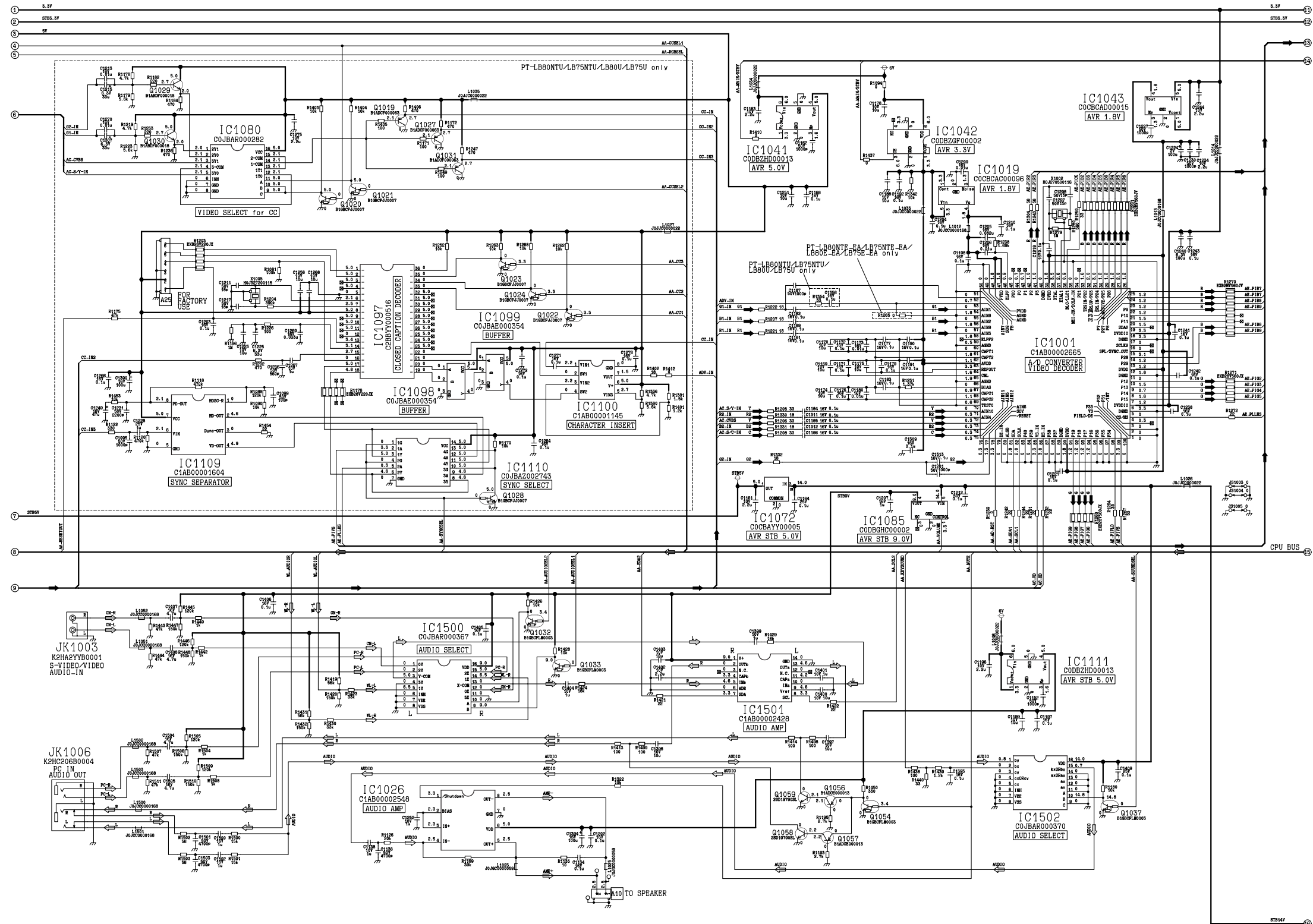
Precautions:

1. NEVER touch the HOT part or the HOT and COLD parts at the same time, or you may get an electric shock.
2. NEVER short-circuit the HOT and COLD circuits, or the fuse may blow and the parts may break.
3. NEVER connect an instrument such oscilloscope to the HOT and COLD circuit simultaneously, or the fuse may blow. Connect the ground of instruments to the ground of the circuit being measured.
4. MAKE SURE to unplug the power cord from the power outlet before removing the chassis.



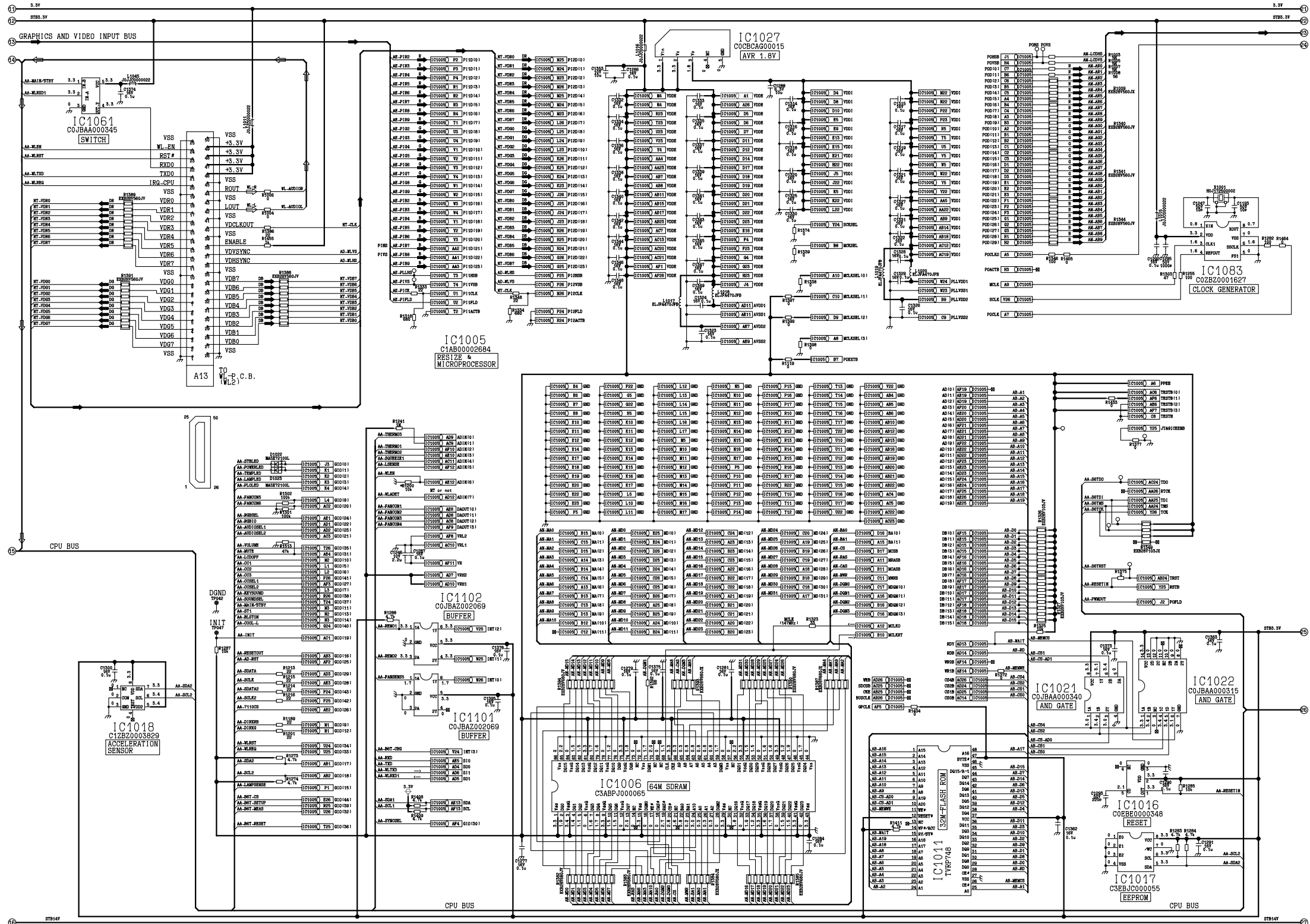
## 12.2. A-P.C.Board (2/6)

**A-P.C.Board (2/6) TXANP01QPRZ (PT-LB80NTU/LB75NTU), TXANP01VKG7 (PT-LB80NTE/EA, PT-LB75NTE/EA)  
TXANP01QQAQ (PT-LB80U/LB75U), TXANP01VKH9 (PT-LB80E/EA, PT-LB75E/EA)**



12.3. A-P.C.Board (3/6)

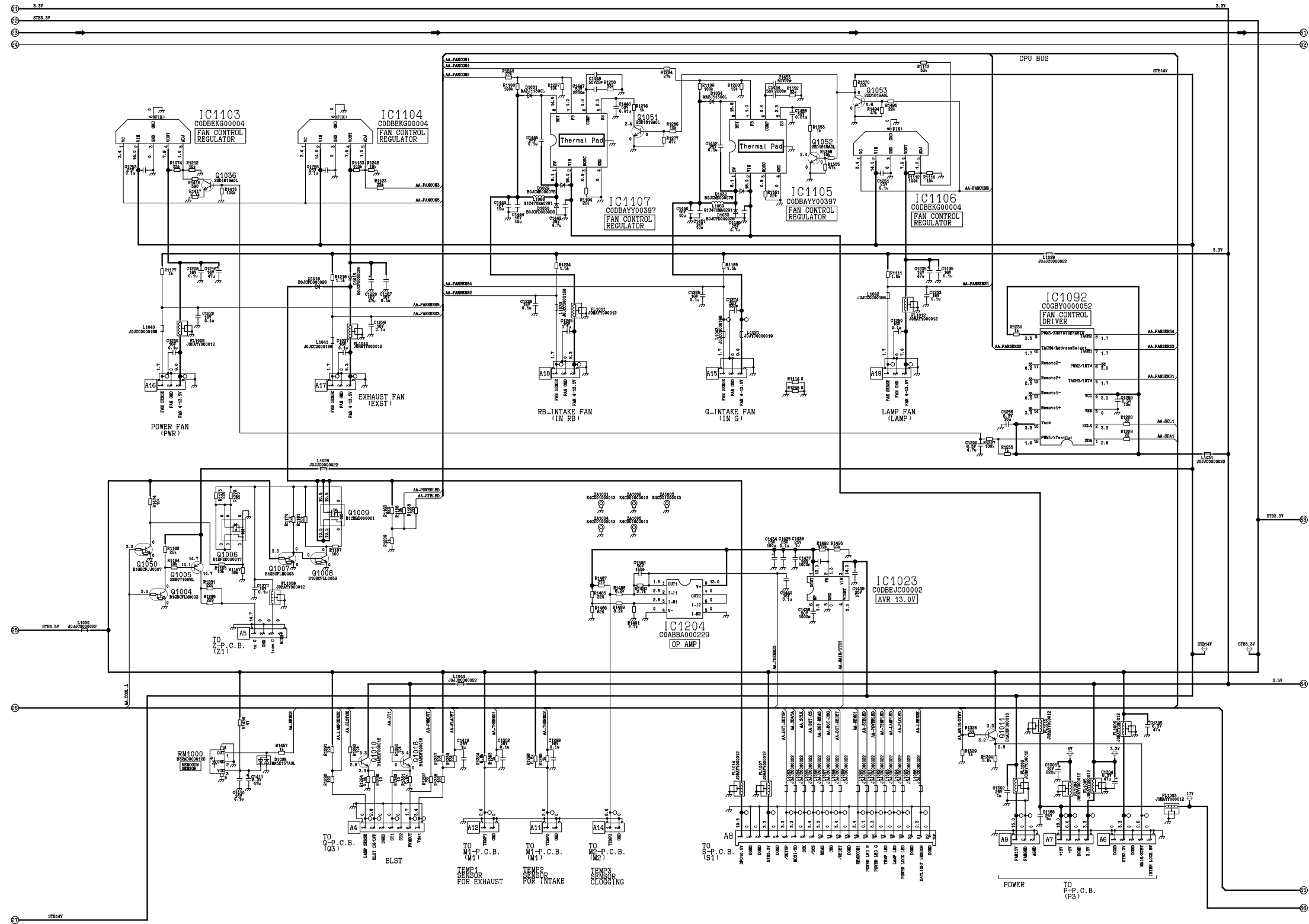
A-P.C.Board (3/6) TXANP01QPRZ (PT-LB80NTU/LB75NTU), TXANP01VKG7 (PT-LB80NTE/EA, PT-LB75NTE/EA)  
TXANP01QQAQZ (PT-LB80U/LB75U), TXANP01VKH9 (PT-LB80E/EA, PT-LB75E/EA)





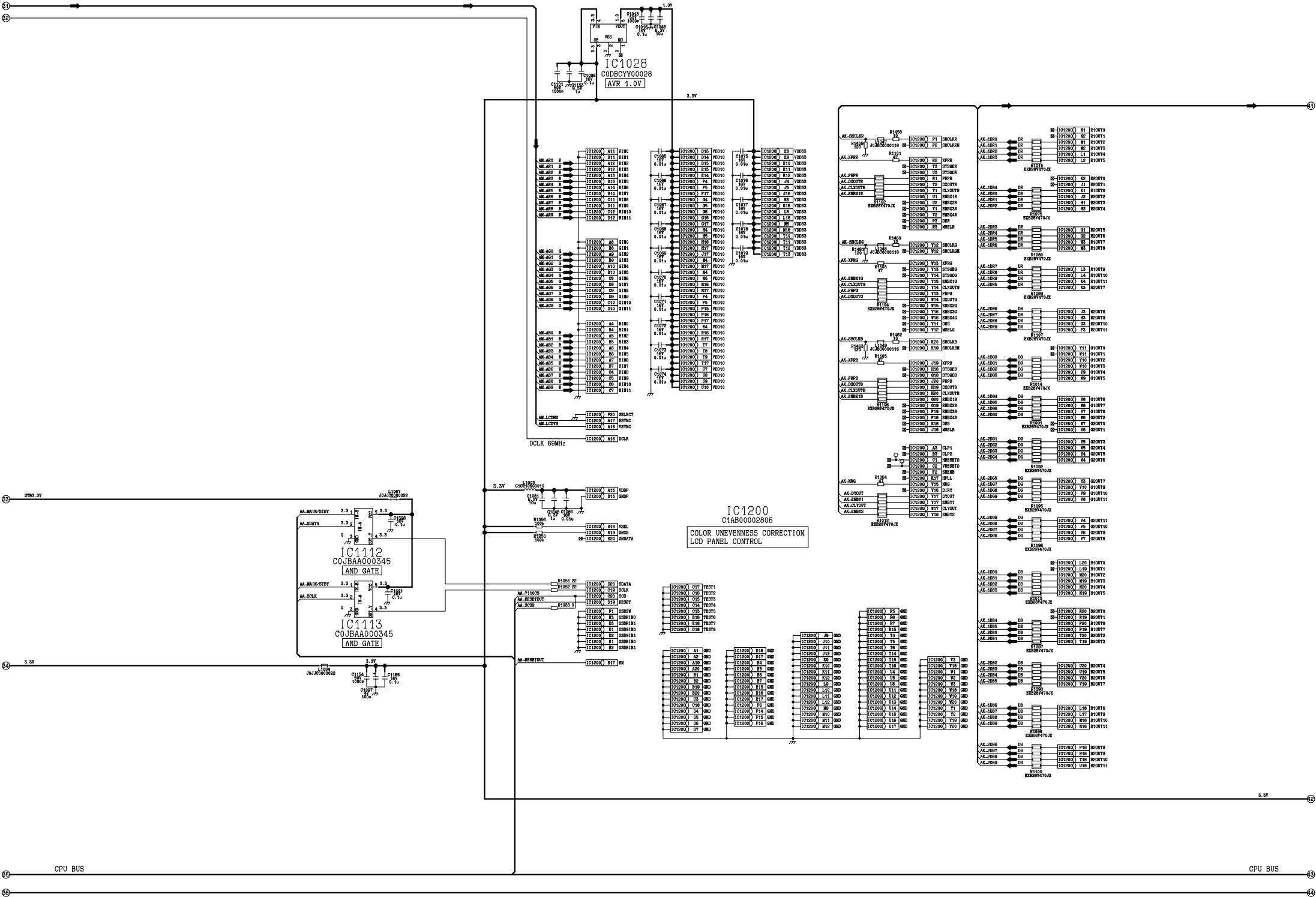
## 12.4. A-P.C.Board (4/6)

**A-P.C.Board (4/6) TXANP01QPRZ (PT-LB80NTU/LB75NTU), TXANP01VKG7 (PT-LB80NTE/EA, PT-LB75NTE/EA)  
TXANP01QQAQ (PT-LB80U/LB75U), TXANP01VKH9 (PT-LB80E/EA, PT-LB75E/EA)**



12.5. A-P.C.Board (5/6)

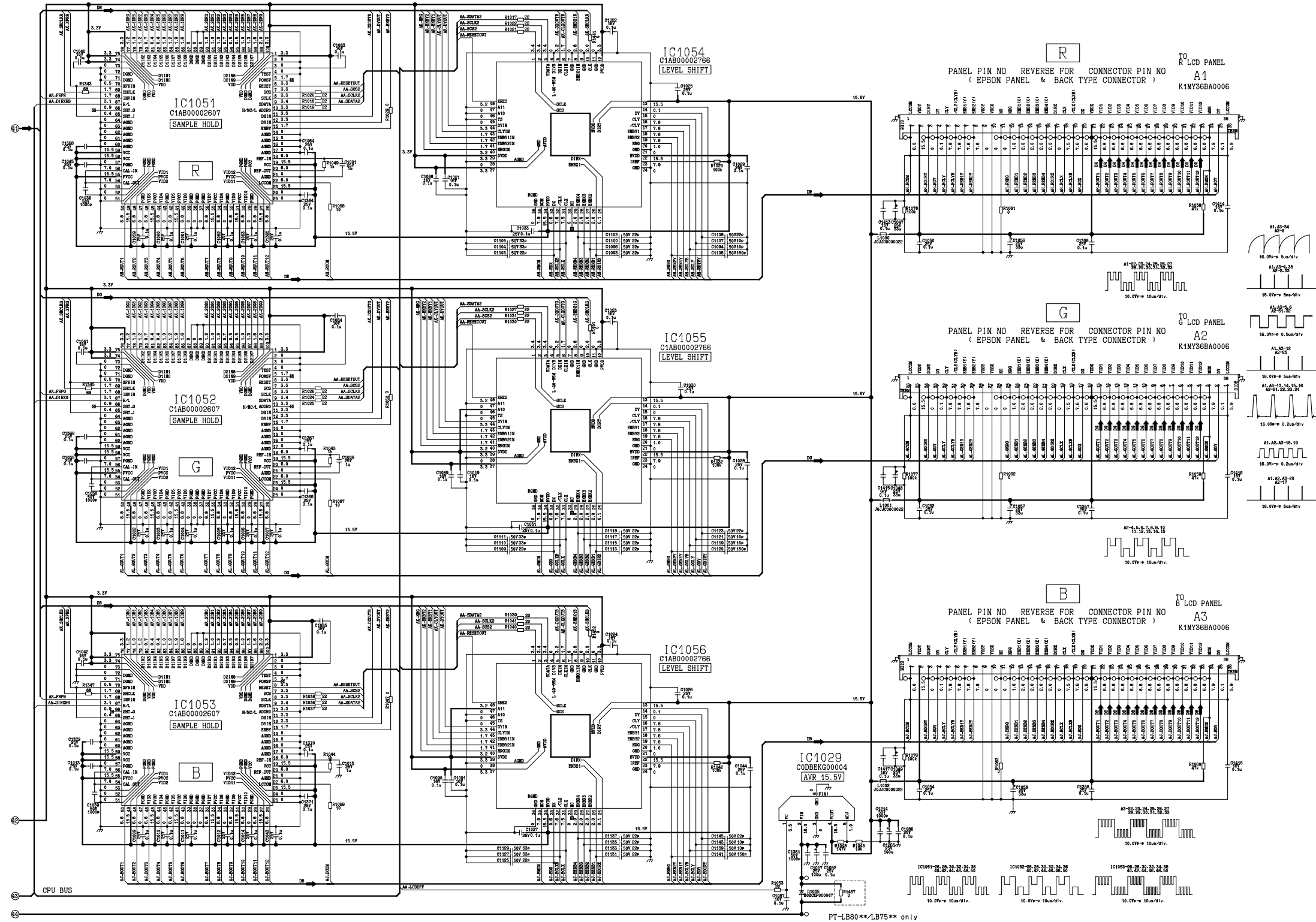
A-P.C.Board (5/6) TXANP01QPRZ (PT-LB80NTU/LB75NTU), TXANP01VKG7 (PT-LB80NTE/EA, PT-LB75NTE/EA)  
TXANP01QQAZ (PT-LB80U/LB75U), TXANP01VKH9 (PT-LB80E/EA, PT-LB75E/EA)



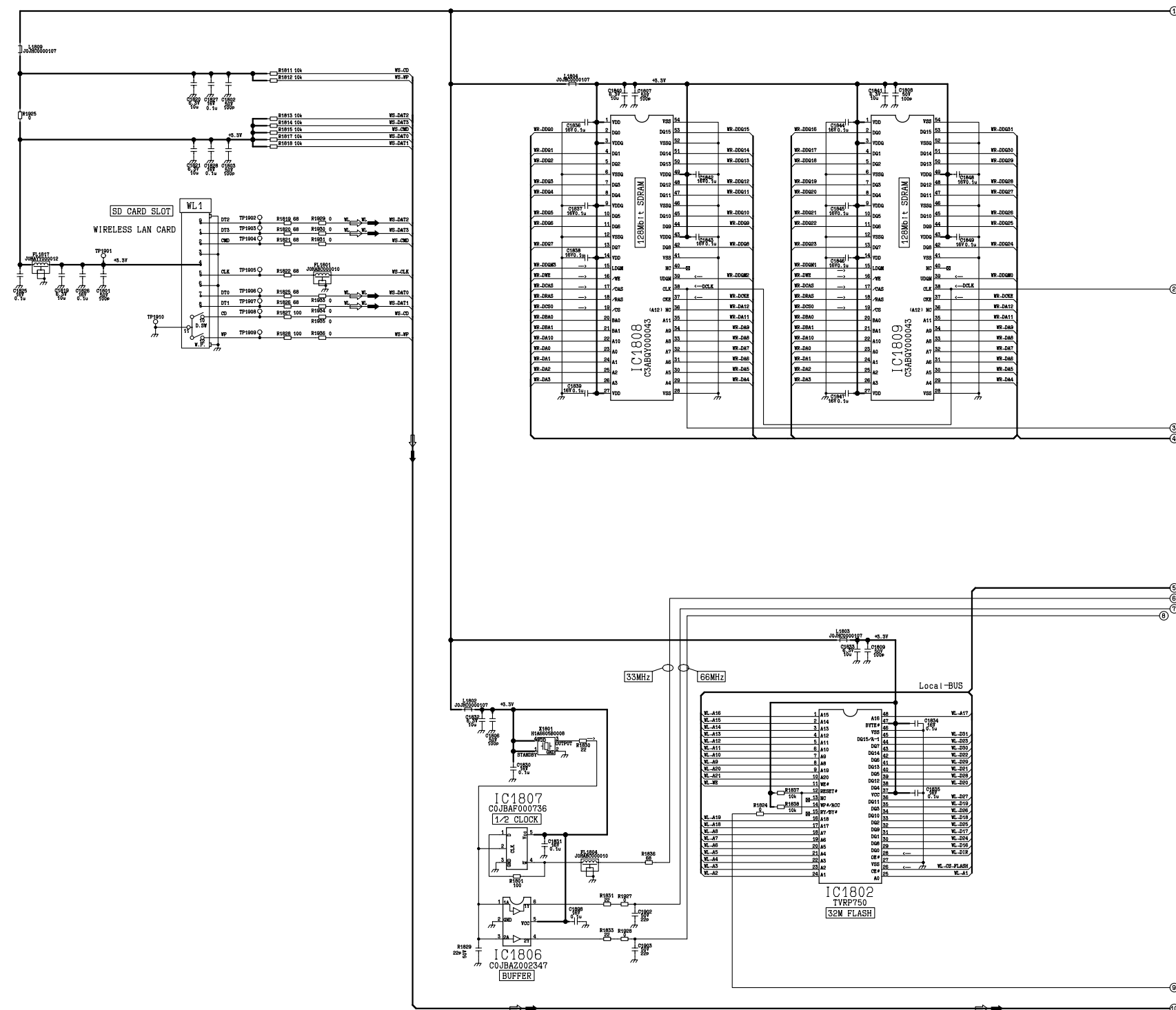


## 12.6. A-P.C.Board (6/6)

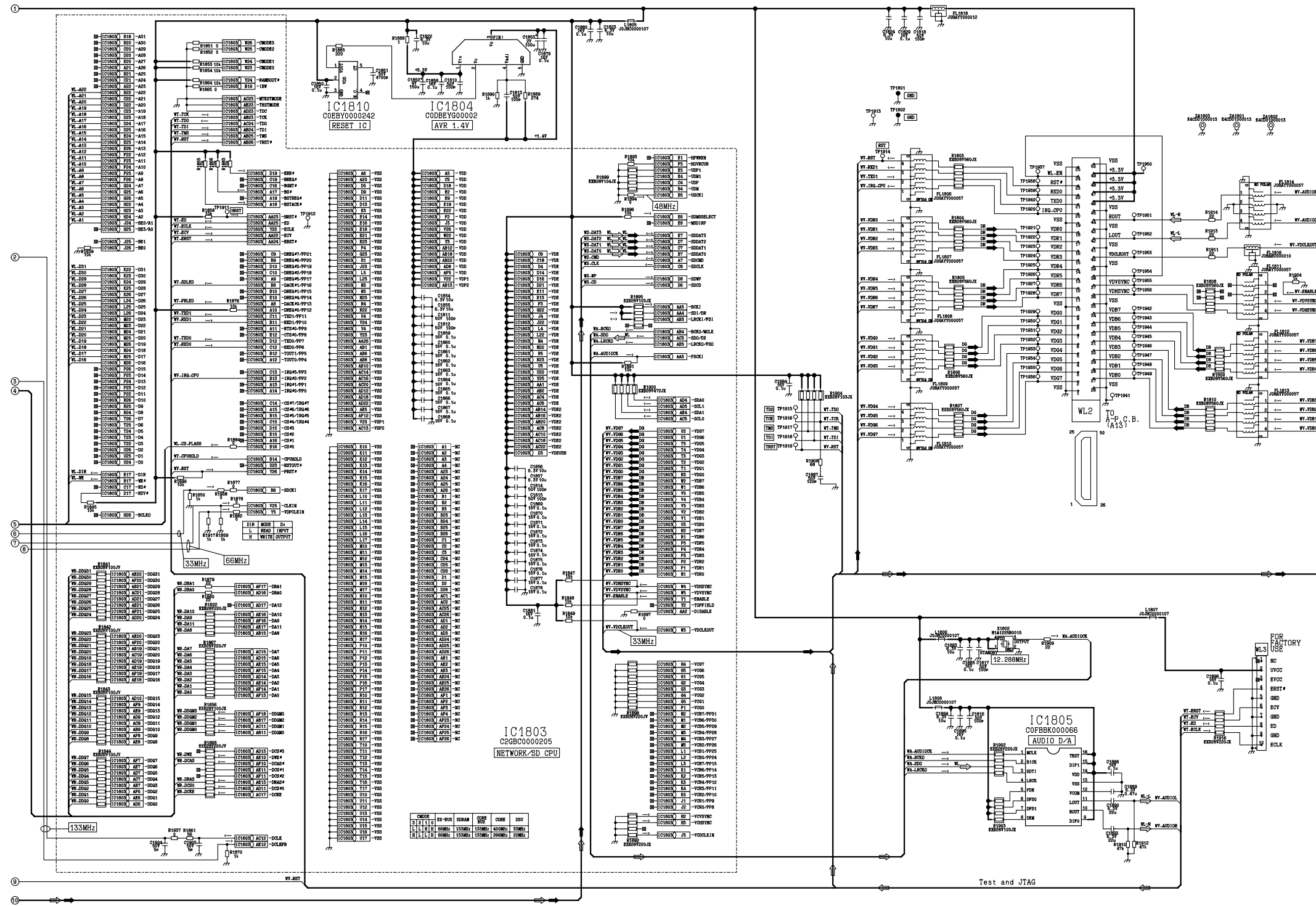
A-P.C.Board (6/6) TXANP01QPRZ (PT-LB80NTU/LB75NTU), TXANP01VKG7 (PT-LB80NTE/EA, PT-LB75NTE/EA)  
TXANP01QQAQ (PT-LB80U/LB75U), TXANP01VKH9 (PT-LB80E/EA, PT-LB75E/EA)



## 12.7. WL-P.C.Board (1/2)

**WL-P.C.Board (1/2) TNPA4537 (PT-LB80NT\*\*/LB75NT\*\* only)**

## 12.8. WL-P.C.Board (2/2)

**WL-P.C.Board (2/2) TNPA4537 (PT-LB80NT\*\*/LB75NT\*\* only)**

12.9. S-Module

S-Module TXANP99VKG7

F

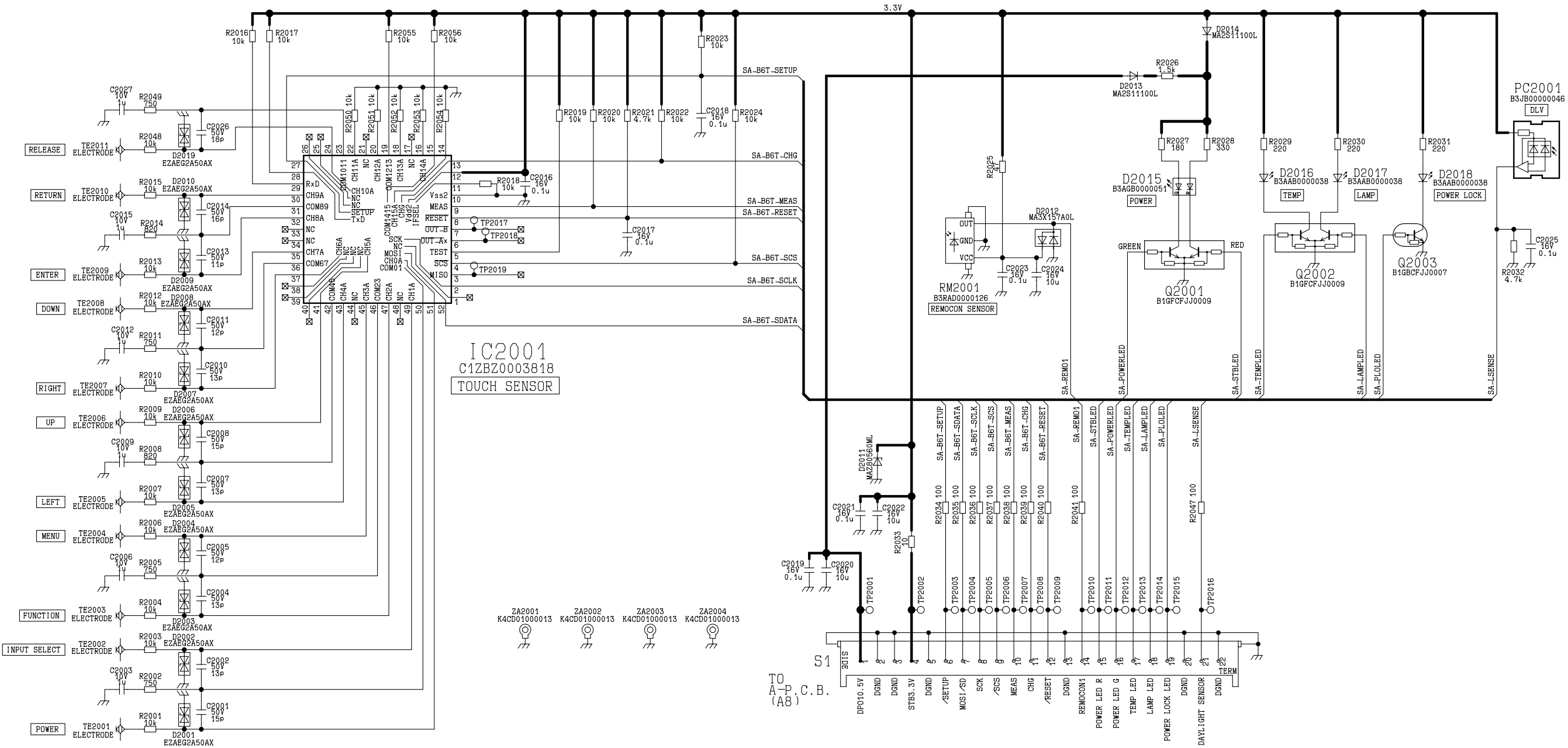
E

D

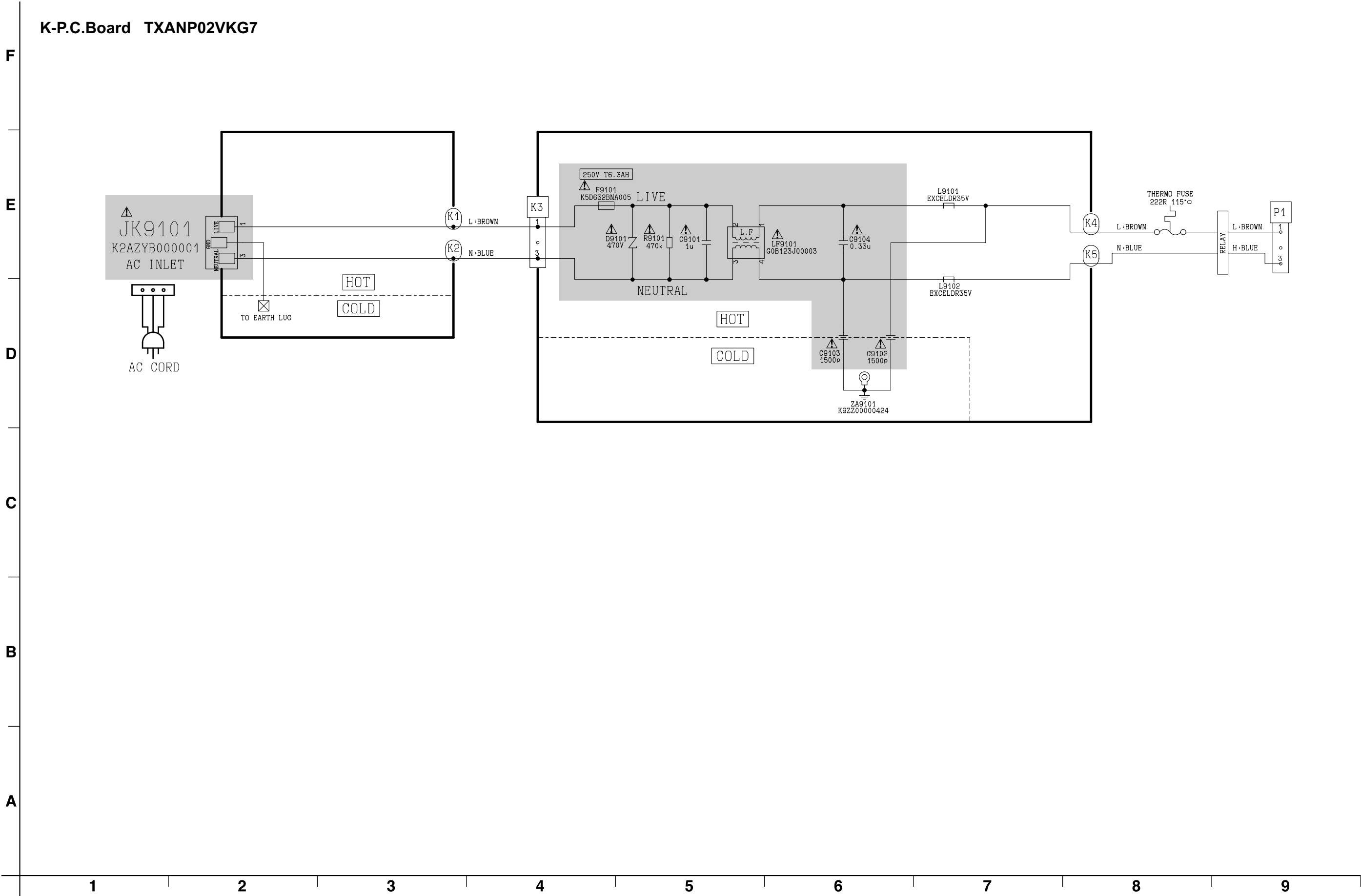
C

B

A



12.10. K-P.C.Board

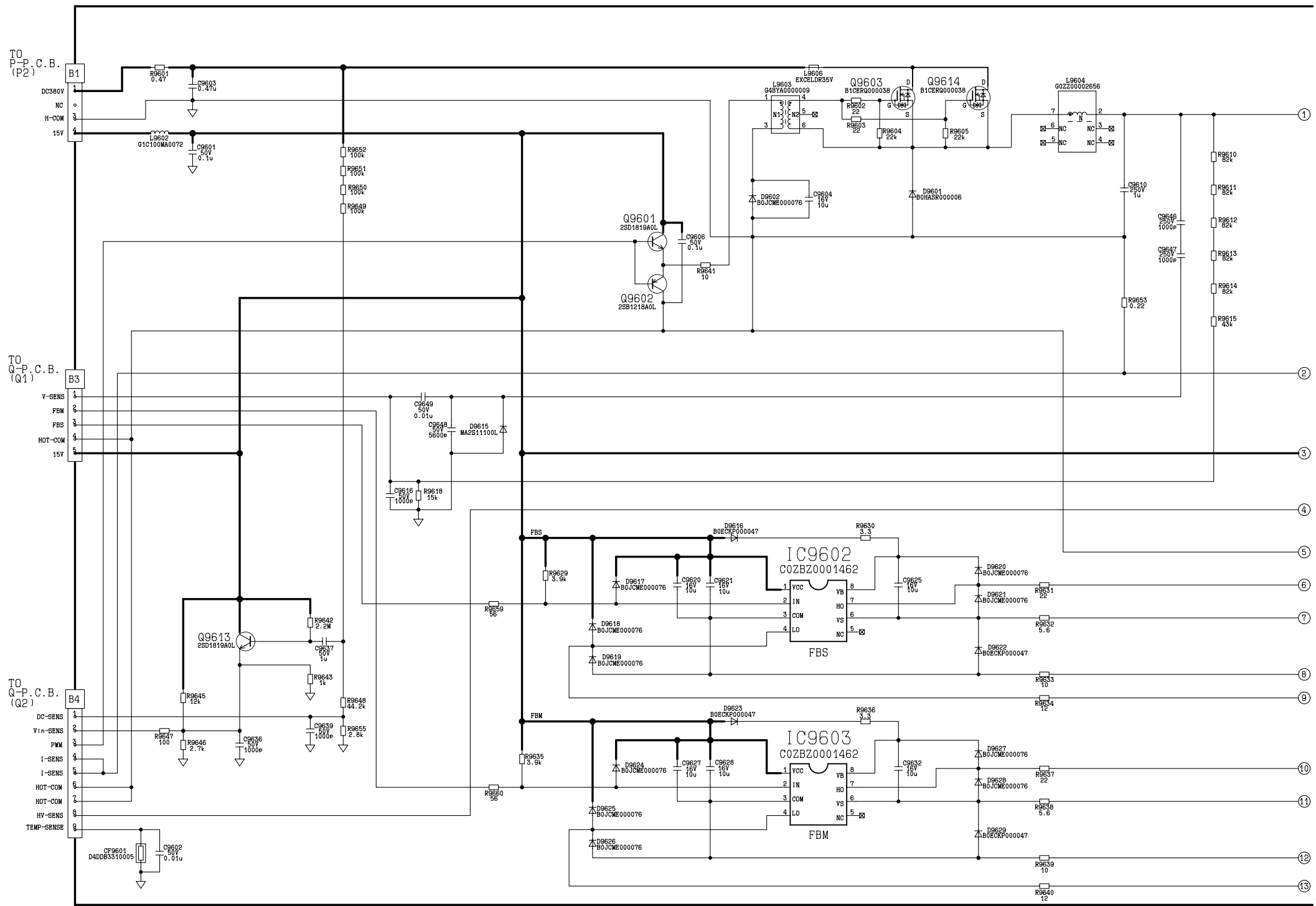


12.11. B-Module (1/2)

B-Module TXANP04VKG7 (1/2)

Module Replacement

Only supplied components IC9602-03, Q9601-11, Q9614, D9601, D9604-09, D9611-12, D9616-29, R9601, R9630-34, R9636-40, R9653, C9603, C9610, C9617-18

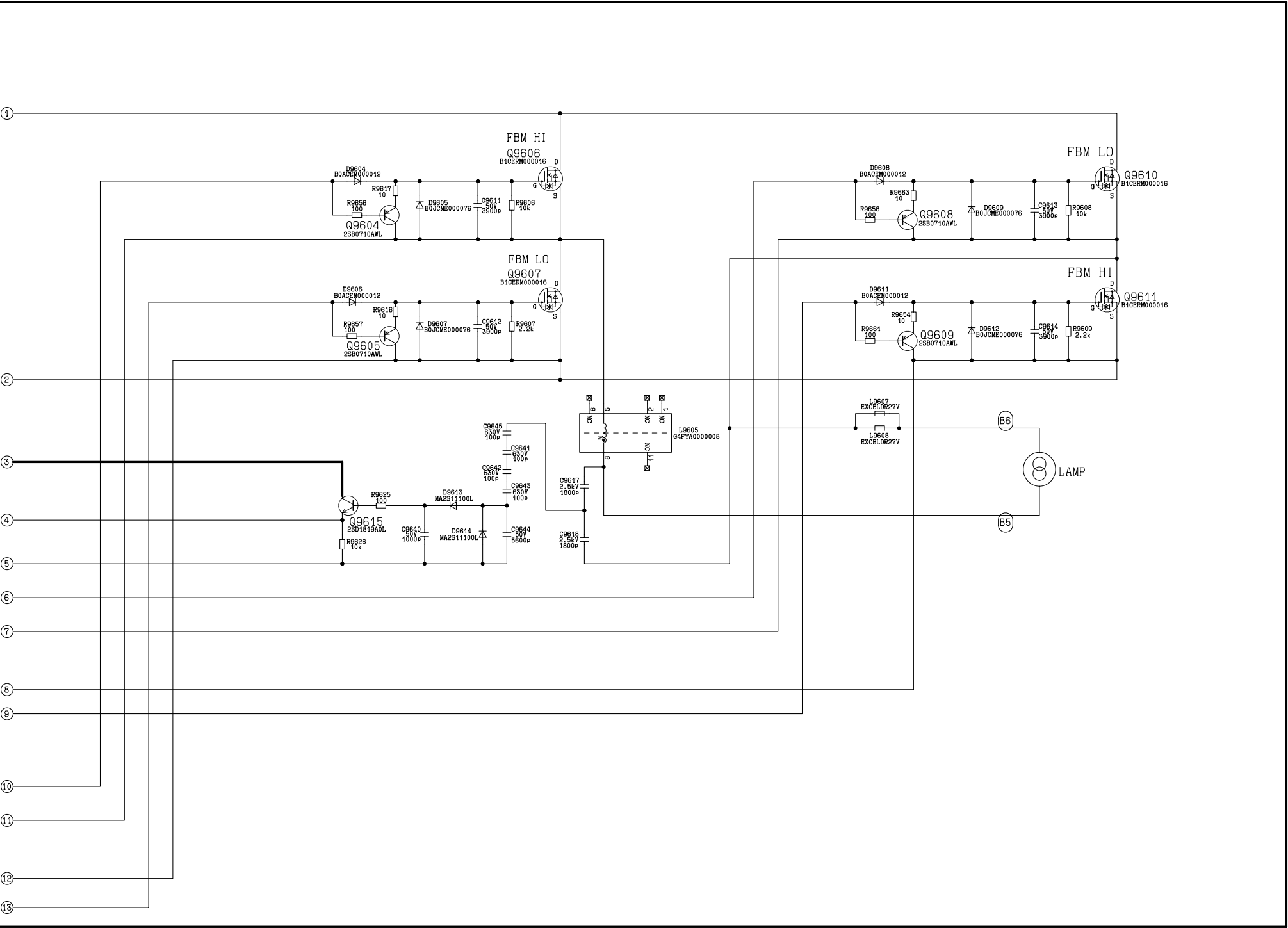


12.12. B-Module (2/2)

B-Module TXANP04VKG7 (2/2)

Module Replacement

Only supplied components IC9602-03, Q9601-11, Q9614, D9601, D9604-09, D9611-12, D9616-29, R9601, R9630-34, R9636-40, R9653, C9603, C9610, C9617-18





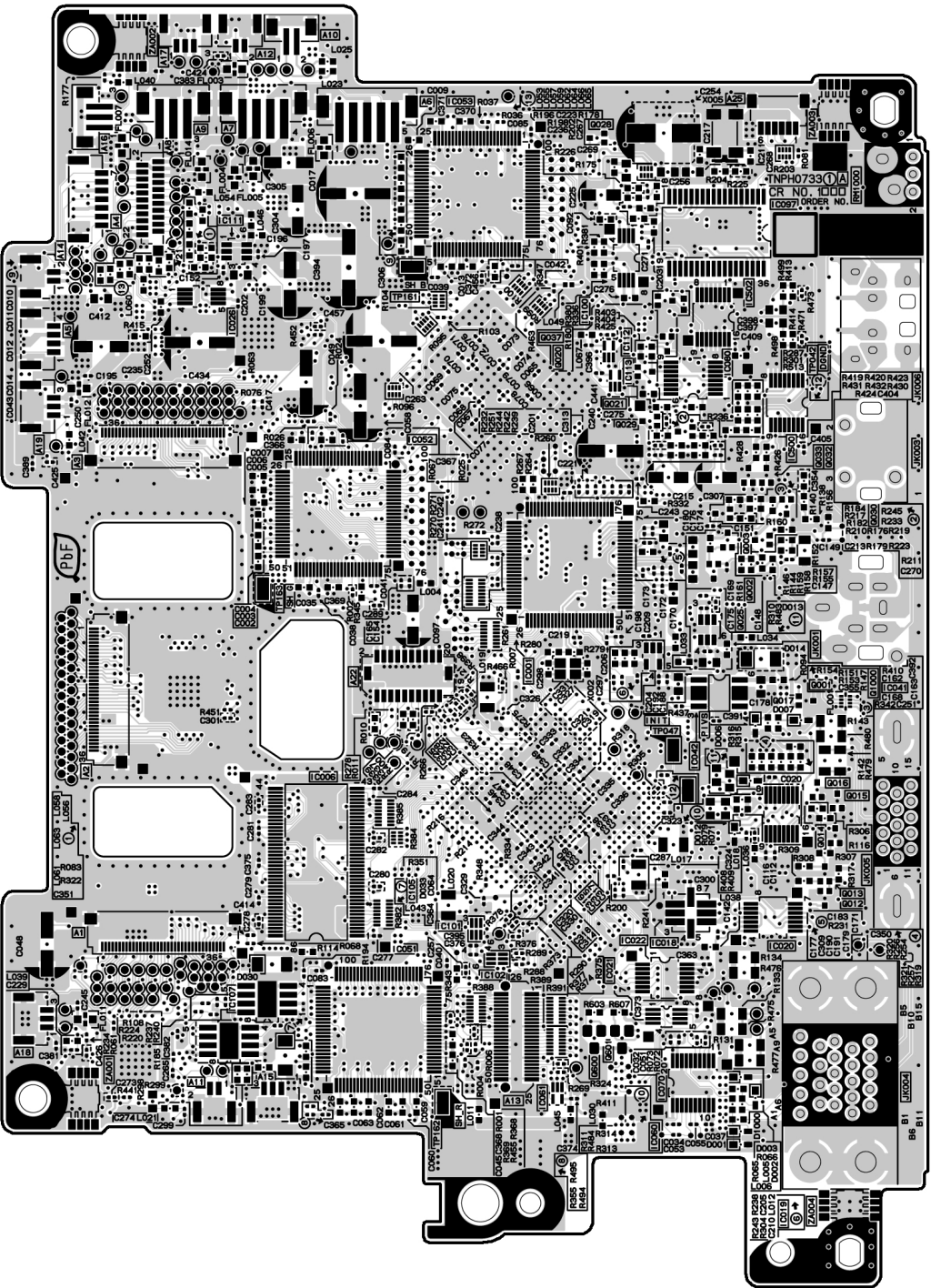


13 Circuit Boards

13.1. A-P.C.Board

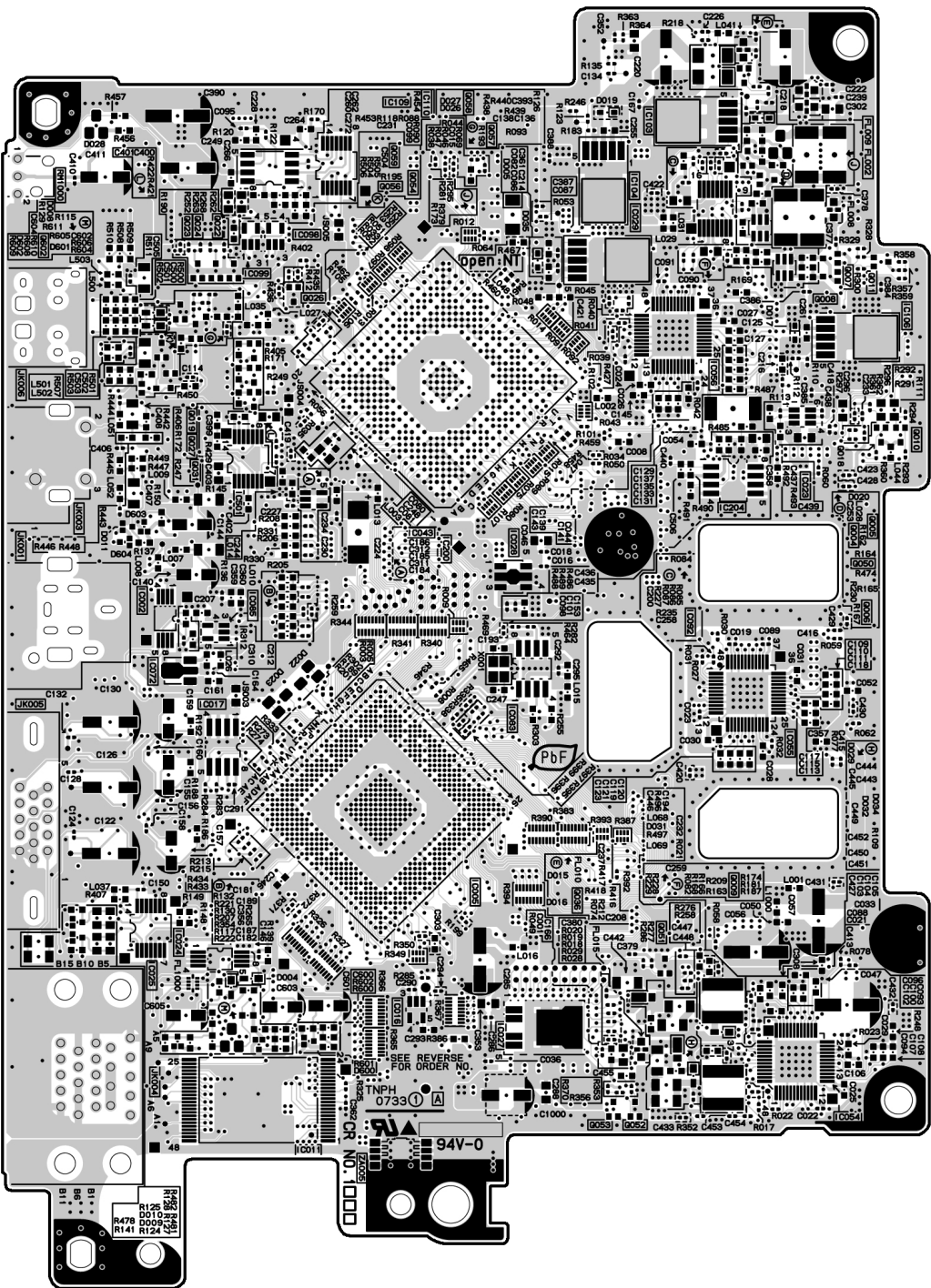
A-P.C.Board TXANP01QPRZ (PT-LB80NTU/LB75NTU)  
(Foil Side) TXANP01VKG7 (PT-LB80NTE/EA, PT-LB75NTE/EA)  
TXANP01QQA Z (PT-LB80U/LB75U),  
TXANP01VKH9 (PT-LB80E/EA, PT-LB75E/EA)

A-P.C.Board TXANP01QPRZ (PT-LB80NTU/LB75NTU)  
(Component Side) TXANP01VKG7 (PT-LB80NTE/EA, PT-LB75NTE/EA)  
TXANP01QQA Z (PT-LB80U/LB75U),  
TXANP01VKH9 (PT-LB80E/EA, PT-LB75E/EA)



A-P.C.Board (Foil Side)	
IC	
IC1001	C-3
IC1006	B-2
IC1018	B-3
IC1019	B-4
IC1020	B-3
IC1021	B-3
IC1022	B-3
IC1026	D-1
IC1041	C-3
IC1042	C-3
IC1051	B-2
IC1052	C-2
IC1053	E-2
IC1060	B-3
IC1061	A-3
IC1070	A-3
IC1080	D-3
IC1097	D-3
IC1100	D-3
IC1101	B-2
IC1102	B-2
IC1105	B-2
IC1107	B-2
IC1111	D-1
IC1112	D-3
IC1113	D-3
IC1500	D-3
IC1502	E-4
TRANSISTOR	
Q1000	A-3
Q1001	C-3
Q1002	A-3
Q1003	A-3
Q1012	B-4
Q1013	B-4
Q1014	B-4
Q1015	B-4
Q1016	C-4
Q1017	C-3
Q1020	D-3
Q1021	D-3
Q1025	A-3
Q1028	E-3
Q1029	E-3
Q1030	D-3
Q1032	D-3
Q1033	D-3
Q1037	D-3
Q1600	A-3
Q1601	A-3

ADDRESS INFORMATION



A-P.C.Board (Component Side)	
IC	
IC1002	C-5
IC1005	B-6
IC1011	A-6
IC1016	B-6
IC1017	C-6
IC1023	D-8
IC1024	B-6
IC1025	B-6
IC1027	B-7
IC1028	C-7
IC1029	D-7
IC1043	C-6
IC1054	B-8
IC1055	C-8
IC1056	D-7
IC1072	C-6
IC1083	C-7
IC1085	C-6
IC1092	D-7
IC1098	D-6
IC1099	D-6
IC1103	E-7
IC1104	E-7
IC1106	D-8
IC1109	E-6
IC1110	E-7
IC1200	D-7
IC1204	D-8
IC1501	D-6
TRANSISTOR	
Q1004	C-8
Q1005	C-8
Q1006	C-8
Q1007	D-8
Q1008	D-8
Q1009	D-8
Q1010	D-8
Q1011	D-8
Q1018	D-8
Q1019	D-6
Q1022	D-6
Q1023	D-6
Q1024	D-6
Q1027	D-6
Q1031	D-6
Q1036	B-7
Q1050	C-8
Q1051	B-7
Q1052	A-7
Q1053	A-7
Q1054	E-6
Q1056	E-6
Q1057	E-7
Q1058	E-7
Q1059	E-6
Q1062	D-5

ADDRESS INFORMATION

13.2. S-Module, WL-P.C.Board

F

E

D

C

B

A

S-Module TXANP99VKG7  
(Foil Side)

1

2

S-Module TXANP99VKG7  
(Component Side)

3

4

WL-P.C.Board TNPA4537  
(Foil Side)  
(PT-LB80NT\*\*/LB75NT\*\* only)

WL-P.C.Board (Foil Side)			
IC			
IC1803	D-6	IC1807	D-7
IC1804	C-7	IC1808	C-6
IC1806	D-7		

ADDRESS INFORMATION

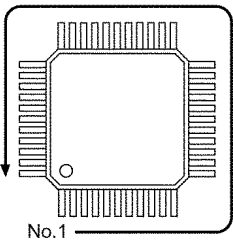
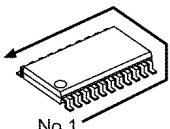
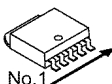
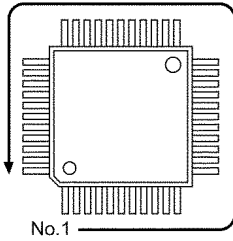
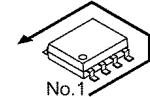
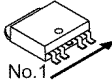
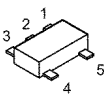
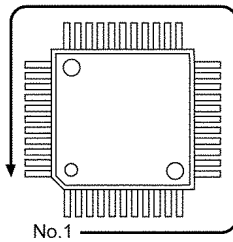
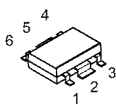

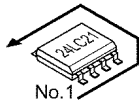
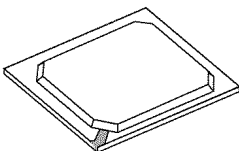
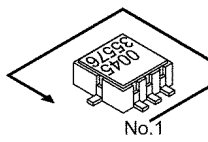
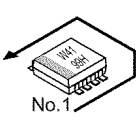
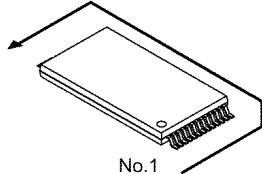
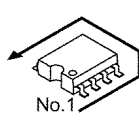

WL-P.C.Board TNPA4537  
(Component Side)  
(PT-LB80NT\*\*/LB75NT\*\* only)

WL-P.C.Board (Component Side)			
IC			
IC1802	D-8	IC1809	C-8
IC1805	D-9	IC1810	C-8

ADDRESS INFORMATION

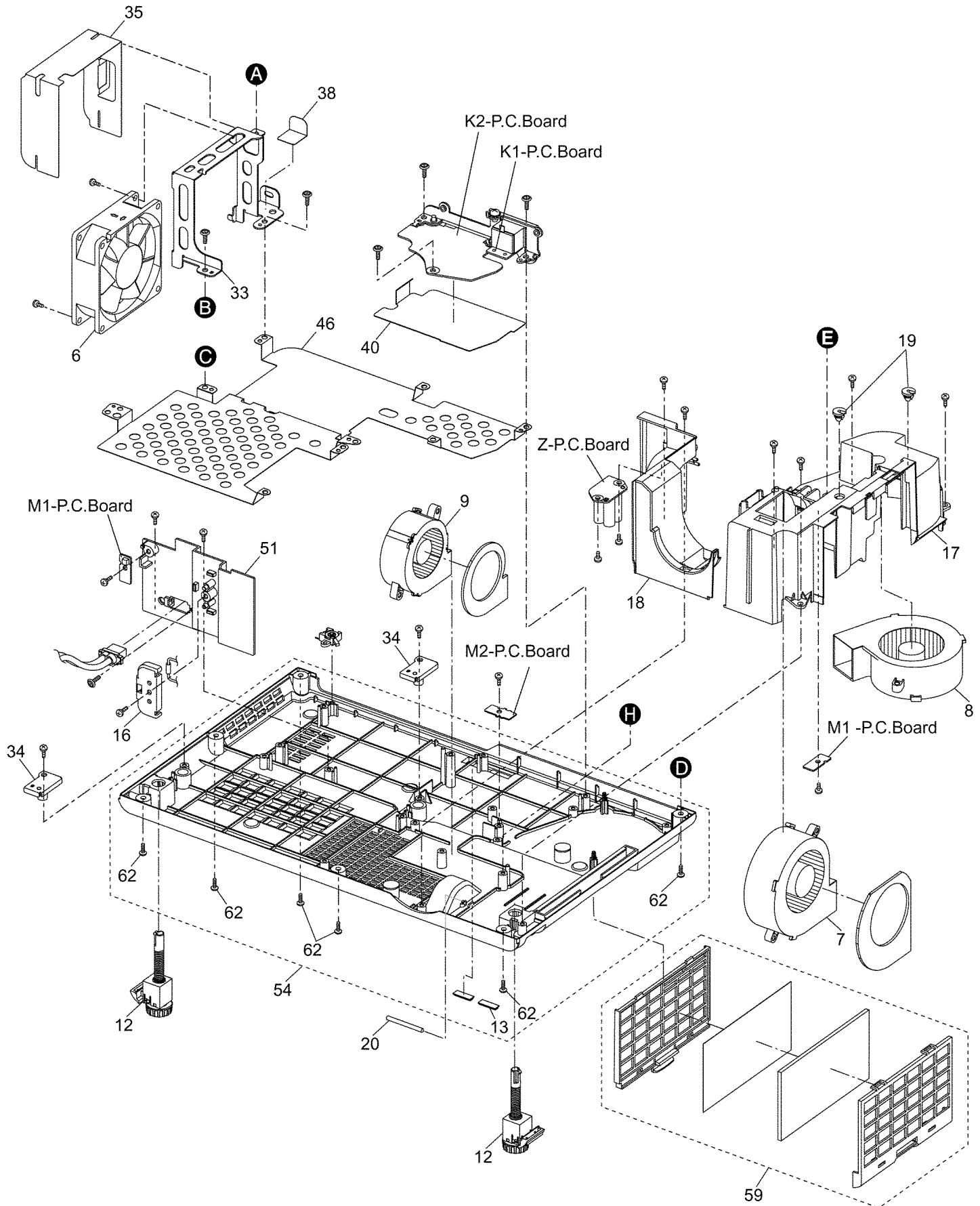
62

# 14 Terminal guide of ICs and transistors

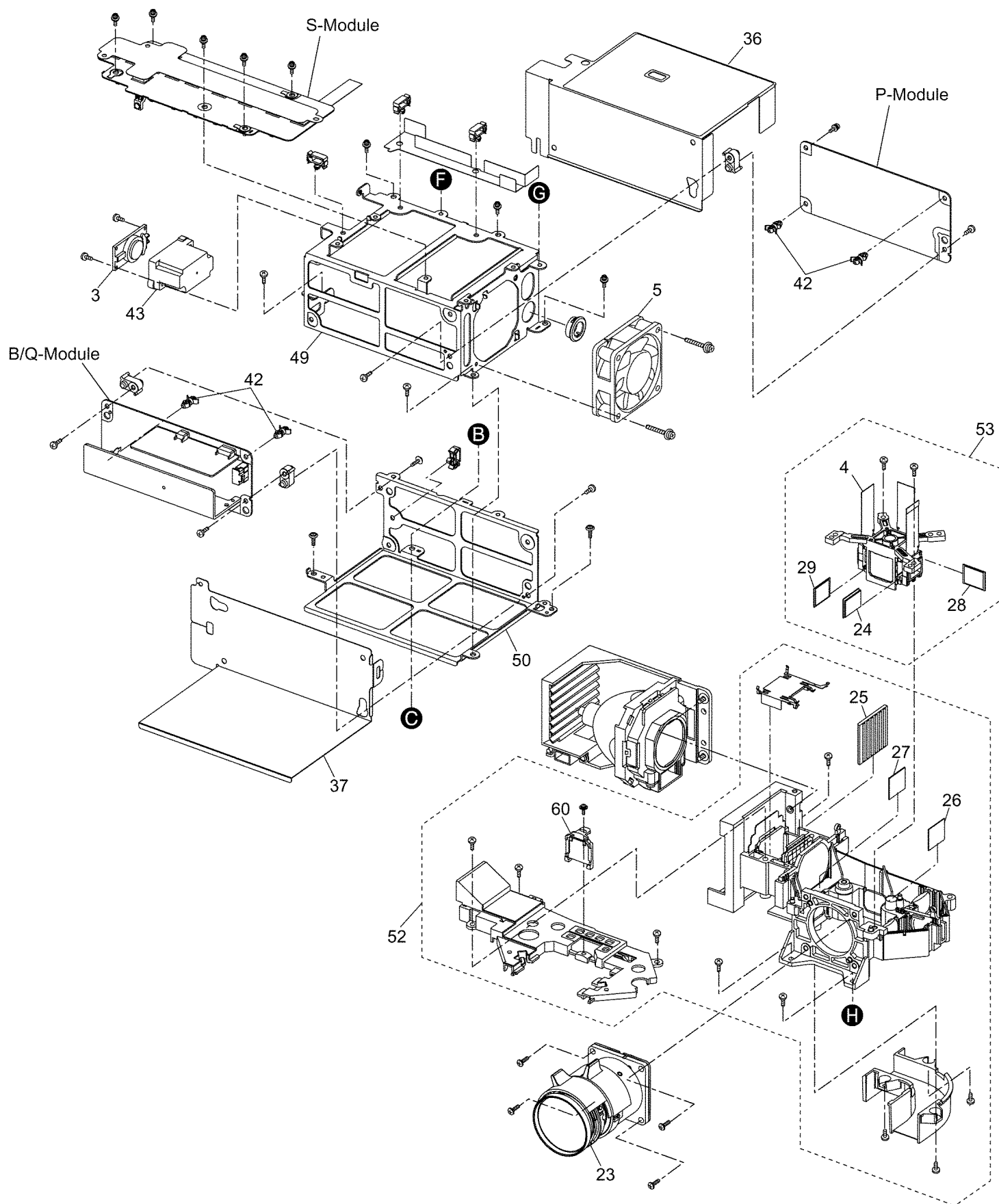
 <p>No.1</p> <p>C1AB00002766 48 Pin</p>	 <p>No.1</p> <p>C0JBAZ002743 14 Pin  C1AB00002428 14 Pin  C0JBAZ002743 14 Pin  C3ABPJ000065 86 Pin  C0ZBZ0001361 20 Pin  C0JBAA000315 14 Pin  C0JBAZ001876 14 Pin  C0ABZA000068 16 Pin  C0JBAR000367 16 Pin  C0JBAR000282 16 Pin  C0JBAR000370 16 Pin  TVRP563 36 Pin</p>	 <p>No.1</p> <p>C0DBEKG00004 5 Pin  C0DBAYY00397 5 Pin</p>
 <p>No.1</p> <p>C1AB00002665 100 Pin</p>	 <p>No.1</p> <p>C3EBJC000055 8 Pin  C3EBCC000052 8 Pin  C1AB00001145 8 Pin</p>	 <p>No.1</p> <p>C0CBCAG00015 5 Pin</p>  <p>C0DBGHC00002 5 Pin  C0JBAE000354 5 Pin</p>
 <p>No.1</p> <p>C1AB00002607 100 Pin</p>	 <p>C0DBZGF00002 6 Pin</p>	 <p>C0CBAYY00005 3 Pin</p>  <p>No.1</p> <p>C0GBY0000052 16 Pin</p>
 <p>C1AB00002684  C1AB00002806</p>	 <p>No.1</p> <p>C1ZBZ0003829 8 Pin</p>	 <p>No.1</p> <p>C0JBAA000340 8 Pin</p>
 <p>No.1</p> <p>TVRP748 48 Pin</p>	 <p>No.1</p> <p>C1AB00001604 8 Pin</p>	 <p>B1ABDF000018 3 Pin  B1GBCFJJ0007 3 Pin  B1GBCFLM0003 3 Pin  2SB0710AWL 3 Pin</p>

# 15 Exploded Views

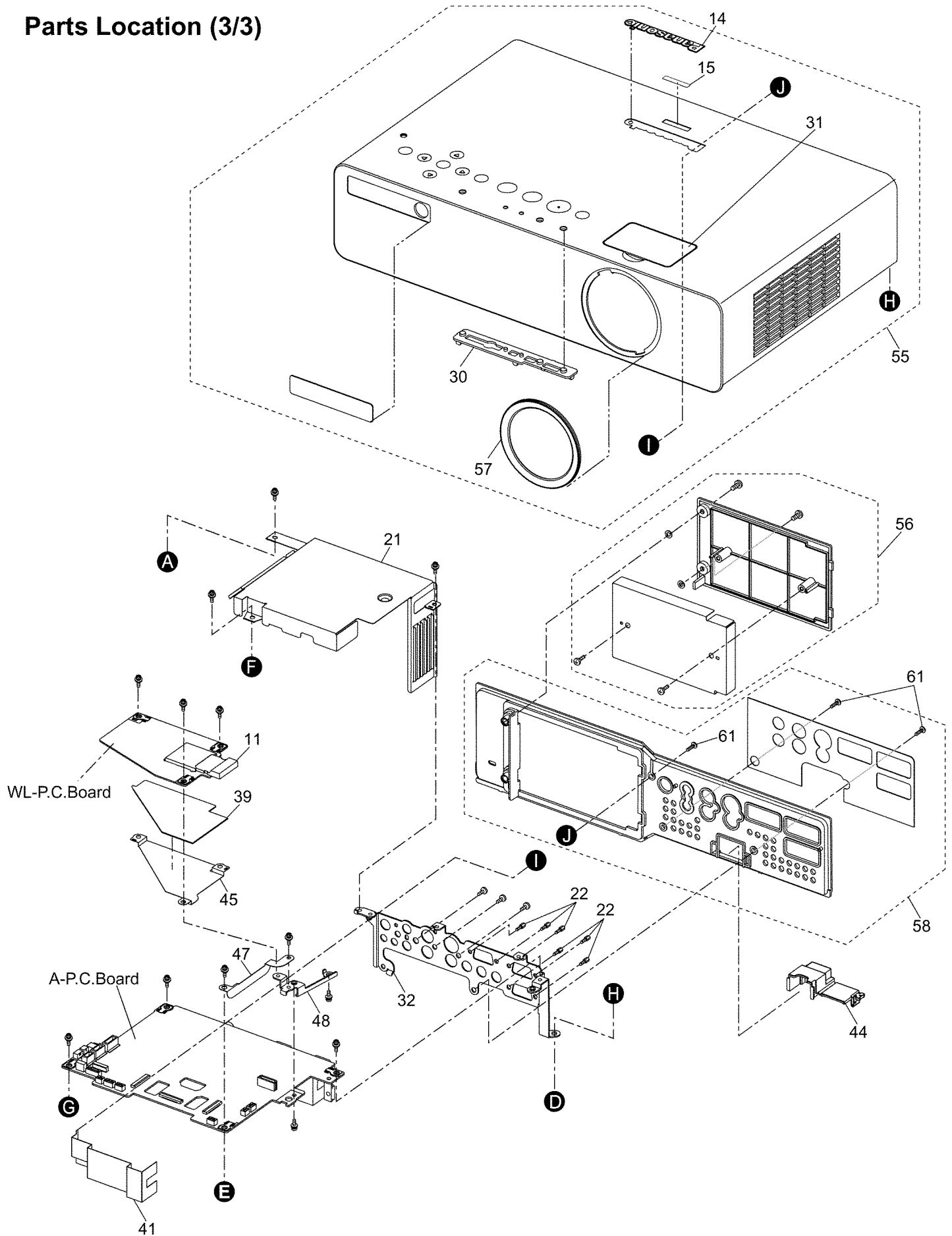
## Parts Location (1/3)



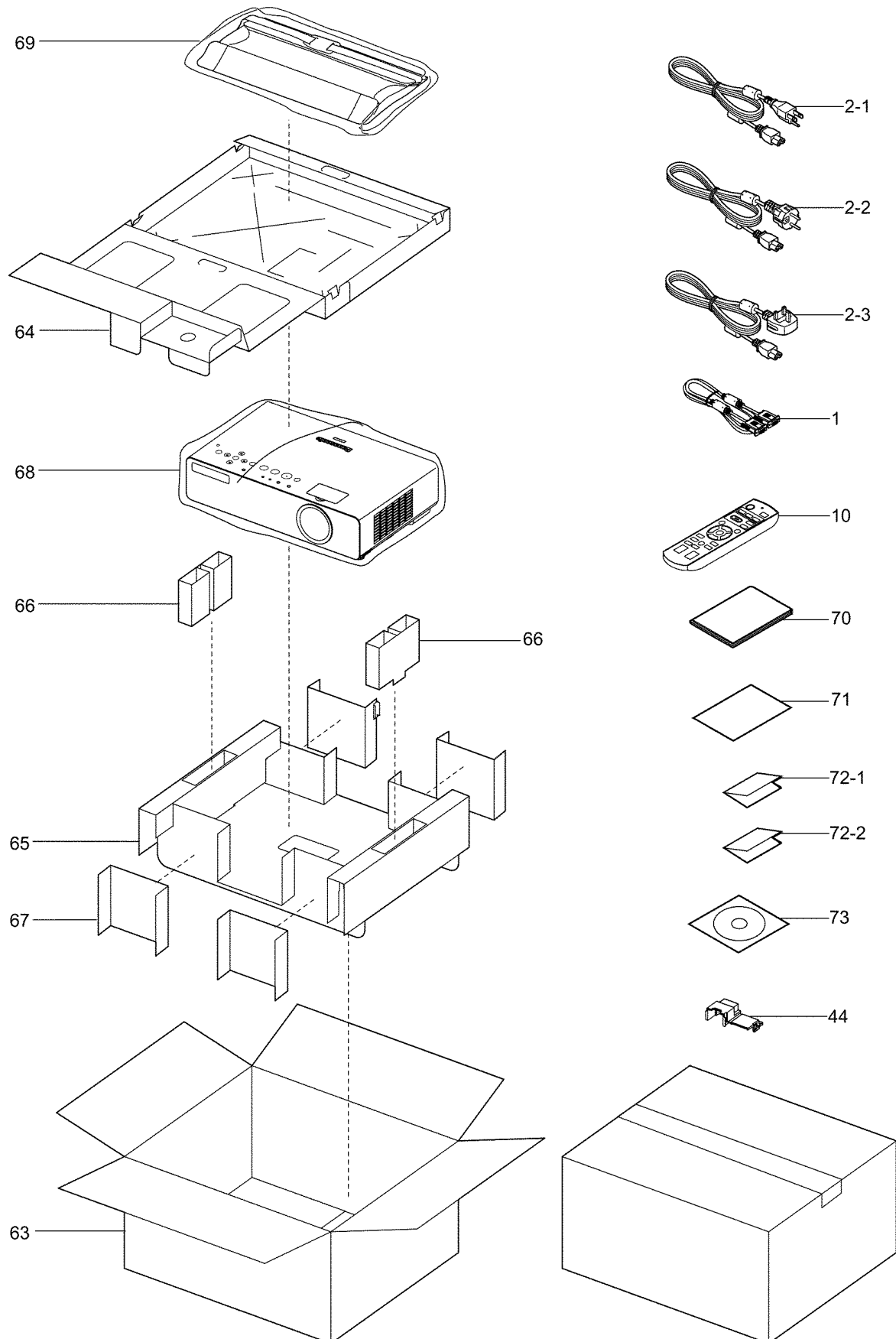
## Parts Location (2/3)



## Parts Location (3/3)



## Packing Parts



# 16 Replacement Parts List

## Important Safety Notice

Components identified by the International symbol  $\triangle$  have special characteristics important for safety.  
When replacing any of these components, use only the manufacturer's specified parts.

### Abbreviation of part name and description

#### 1. Resistor

Example:

ERD25TJ104 C 100KOHM, J, 1/4W

TYPE

ALLOWANCE

TYPE	ALLOWANCE
C : Carbon	F : $\pm 1\%$
F : Fuse	G : $\pm 2\%$
M : Metal Oxide	J : $\pm 5\%$
Metal Film	K : $\pm 10\%$
S : Solid	M : $\pm 20\%$
W : Wire Wound	

#### 2. Capacitor

Example:

ECKF1H103ZF C 0.01PF, Z, 50V

TYPE

ALLOWANCE

TYPE	ALLOWANCE
C : Ceramic	C : $\pm 0.25\text{ pF}$
E : Electrolytic	D : $\pm 0.5\text{ pF}$
P : Polyester	F : $\pm 1\text{ pF}$
PP : Polypropylene	J : $\pm 5\%$
S : Polystyrol	K : $\pm 10\%$
T : Tantalum	L : $\pm 15\%$
	M : $\pm 20\%$
	P : $+100\%, -0\%$
	Z : $+80\%, -20\%$

### Notes:

Printed circuit board assembly with mark (RTL) is no longer available after production discontinuation of the complete set.

Ref. No.	Part No.	Part Name & Description	Remarks
[MECHANICAL PARTS]			
	J0KA00000056	CORE	
	J0KA00000056	CORE	
1	K1HA15DA0002	VGA CABLE	
2-1	K2CG3DR00007	POWER CORD	$\triangle$ LB80NTU/LB75NTU/ LB80U/LB75U
2-2	K2CM3DR00004	POWER CORD	$\triangle$ LB80NTE/EA, LB75NTE/EA, LB80E/EA, LB75E/EA
2-3	K2CT3DR00008	POWER CORD	$\triangle$ LB80NTEA/LB75NTE A/LB80EA/LB75EA
3	L0AA04C00013	SPEAKER	
4	TZTEN01VKG7	LCD PANEL (B) A (+METAL)	$\triangle$ LB80NTU/E/EA, LB80U/E/EA
	TZTEN01VKG8	LCD PANEL (B) A (+METAL)	$\triangle$ LB75NTU/E/EA, LB75U/E/EA
	TZTEN02VKG7	LCD PANEL (B) B (+METAL)	$\triangle$ LB80NTU/E/EA, LB80U/E/EA
	TZTEN02VKG8	LCD PANEL (B) B (+METAL)	$\triangle$ LB75NTU/E/EA, LB75U/E/EA
5	L6FAYYYH0084	POWER FAN	$\triangle$
6	L6FAYYYH0085	VENTILATION FAN	$\triangle$
7	L6FCYYYH0024	INHALATION RB FAN	$\triangle$
8	L6FCYYYH0025	INHALATION FAN	$\triangle$
9	L6FCYYYH0026	LAMP FAN	$\triangle$
10	N2QAYB000260	REMOTE CONTROLLER	$\triangle$ LB80NTU/E/EA, LB75NTU/E/EA
	N2QAYB000262	REMOTE CONTROLLER	$\triangle$ LB80U/E/EA, LB75U/E/EA
11	N5HZZ0000042	LAN CARD (SDIO)	$\triangle$ LB80NTU/E/EA, LB75NTU/E/EA
12	TBLB0085	ADJUST LEG	$\triangle$
13	TBLG3138	RUBBER LEG	
14	TBMA254	PANASONIC BADGE	
15	TBMA257	LOGO BADGE	$\triangle$ LB80NTU/E/EA
	TBMA258	LOGO BADGE	LB75NTU/E/EA
	TBMA259	LOGO BADGE	LB80U/E/EA
	TBMA260	LOGO BADGE	LB75U/E/EA

Ref. No.	Part No.	Part Name & Description	Remarks
	TBMG933	MODEL NAME PLATE	$\triangle$ LB80NTU
	TBMG934	MODEL NAME PLATE	$\triangle$ LB80NTE
	TBMG935	MODEL NAME PLATE	$\triangle$ LB80NTEA
	TBMG937	MODEL NAME PLATE	$\triangle$ LB75NTU
	TBMG938	MODEL NAME PLATE	$\triangle$ LB75NTE
	TBMG939	MODEL NAME PLATE	$\triangle$ LB75NTEA
	TBMG940	MODEL NAME PLATE	$\triangle$ LB80U
	TBMG941	MODEL NAME PLATE	$\triangle$ LB80E
	TBMG942	MODEL NAME PLATE	$\triangle$ LB80EA
	TBMG943	MODEL NAME PLATE	$\triangle$ LB75U
	TBMG944	MODEL NAME PLATE	$\triangle$ LB75E
	TBMG945	MODEL NAME PLATE	$\triangle$ LB75EA
16	TEEC5120	TEMP FUSE INSTALL METAL	$\triangle$
	TEEC5342	SENSOR FIX METAL	
17	TEEC5343	INHALATION DUCT	$\triangle$
18	TEEC5344	LAMP FAN BASE	$\triangle$
51	TEEC5346	SOCKET HOLDER	$\triangle$
19	TEFC5034	RUBBER CAP	
20	TEJA123	SECURITY SHAFT	
21	TENC5464	LAMP HOUSE	
	TENC5484	WIND GUIDE PLATE	
	TEWA837	BUSTERAID	LB80NTU/E/EA, LB75NTU/E/EA
22	THEC084N	D-SUB FIX SCREW	
23	TKGF0138	LENS	$\triangle$ LB80NTU/E/EA, LB80U/E/EA
	TKGF0139	LENS	$\triangle$ LB75NTU/E/EA, LB75U/E/EA
24	TKGP0054	POLARIZING PLATE/ OUT (R)	
25	TKGP5402	PBS	
26	TKGP5403	POLARIZING PLATE/IN (R)	
27	TKGP5405	POLARIZING PLATE/IN (B)	
28	TKGP5419	POLARIZING PLATE/ OUT (G)	LB80NTU/E/EA, LB80U/E/EA
	TKGP5407	POLARIZING PLATE/ OUT (G)	LB75NTU/E/EA, LB75U/E/EA
29	TKGP5408	POLARIZING PLATE/ OUT (B)	
	TKGP5410	R TRIMMING FILTER	
30	TKKC5327	LED PLATE	



Ref. No.	Part No.	Part Name & Description	Remarks
31	TKKL5437	LENS CONTROL COVER	△
32	TKZF5057	TERMINAL METAL	
	TKZF5058	K-PCB METAL	
	TKZF5059	INLET FIX METAL	
33	TKZJ5075	VENTILATION FAN METAL	
34	TKZX5208	CEILING BOSS METAL	
	TMKG740	ANTIVIBRATION SHEET	
	TMKG864-1	SPONGE 1	
	TMKG865	SPONGE 2	
	TMKG866	SPONGE 3	
	TMKG867	SPONGE 4	
	TMKG892	INSULATING SPONGE 1	
	TMKG893	INSULATING SPONGE 2	
	TMKG894	INSULATING SPONGE 3	
	TMKG898	SPONGE 4	
	TMKG902	SPONGE 5	
	TMKG903	SPONGE 6	
	TMKG908	SHAFT FIX SPONGE	
	TMKG909	SPONGE 7	
	TMKG910	SPONGE 8	
	TMKY253	TAPE (DECORATION WINDOW)	
35	TMKY413	VENTILATION FAN COVER	
36	TMKY414-1	POWER SHIELD SHEET (UPPER)	△
37	TMKY415-1	POWER SHIELD SHEET (BOTTOM)	△
	TMKY417	LEADWIRE ADJUSTMENT SHEET 2	
38	TMKY418	KENSINGTON INSULATION SHEET	
	TMKY419-1	Q-PCB SHIELD SHEET	△
39	TMKY420	WL-PCB SHIELD SHIELD SHEET	LB80NTU/E/EA, LB75NTU/E/EA
40	TMKY422-1	K-PCB SHIELD SHEET	△
41	TMKY547	TERMINAL INSULATION SHEET	
42	TMME279	SPACER (CIRCUIT BOARD)	△
	TMME309	REUSE LOCKING MINI CLAMP	
	TMME327	EDGE COVER	
	TMXE049	BOARD INSTALL METAL	△
43	TMZK5023	SPEAKER BOX	△
63	TPCC42702	CARTON	△ LB80NTU
	TPCC42703	CARTON	△ LB80NTE
	TPCC42704	CARTON	△ LB80NTEA
	TPCC42706	CARTON	△ LB75NTU
	TPCC42707	CARTON	△ LB75NTE
	TPCC42708	CARTON	△ LB75NTEA
	TPCC42709	CARTON	△ LB80U
	TPCC42710	CARTON	△ LB80E
	TPCC42711	CARTON	△ LB80EA
	TPCC42712	CARTON	△ LB75U
	TPCC42713	CARTON	△ LB75E
	TPCC42714	CARTON	△ LB75EA
	TPDA1868	CORNOR PAD	LB80NTU, LB75NTU, LB80U, LB75U
64	TPDF2118	ACCESSORY CARTON	
65	TPDF2119	CUSHION PAD	
66	TPDF2154	CUSHION PAD2	
67	TPDF2183	SUPPLEMENT PAD	
68	TPEH124-1	SET COVER	△
69	TPEP021	CARRING CASE	△
	TPGA3990	DOUBLE CARTON	△ LB80NTU
	TPGA3991	DOUBLE CARTON	△ LB75NTU
	TPGA3992	DOUBLE CARTON	△ LB80U
	TPGA3993	DOUBLE CARTON	△ LB75U
71	TQBH7017-1	SHEET (PASSWORD)	△

Ref. No.	Part No.	Part Name & Description	Remarks
70	TQBJ0244	INSTRUCTION BOOK	△ LB80NTU, LB75NTU, LB80U, LB75U
	TQBJ0245	INSTRUCTION BOOK	△ LB80NTE, LB75NTE, LB80E, LB75E
	TQBJ0246	INSTRUCTION BOOK	△ LB80NTEA, LB75NTEA, LB80EA, LB75EA
	TQBJ7008	HIGH GROUND SHEET	LB80NTU, LB75NTU
	TQD1712010	SHEET	
	TQDJ18004-1	GUARANTEE CARD (CANADA)	LB80NTU, LB75NTU, LB80U, LB75U
	TQDJ18032	GUARANTEE CARD (USA)	LB80NTU, LB75NTU, LB80U, LB75U
72-1	TQDJ19103	QUICK GUIDE WIN (GERMAN/ITALY)	LB80NTE, LB75NTE
	TQDJ19104	QUICK GUIDE WIN (FRENCH/SPANISH)	LB80NTU/E, LB75NTU/E
	TQDJ19105	QUICK GUIDE WIN (ENGLISH/KOREAN)	LB80NTU/E/EA, LB75NTU/E/EA
72-2	TQDJ19106	QUICK GUIDE MAC (GERMAN/ITALY)	LB80NTE, LB75NTE
	TQDJ19107	QUICK GUIDE MAC (FRENCH/SPANISH)	LB80NTU/E, LB75NTU/E
	TQDJ19108	QUICK GUIDE MAC (ENGLISH/KOREAN)	LB80NTU/E/EA, LB75NTU/E/EA
	TQFE320	GATE BLIND SHEET	
	TSXL682	A8-S1 FLEXIBLE CABLE	△
44	TTRA0185	AC LOCK ASSY	△
	TUCB5124	ALUMINUM SHEET 1	
45	TUCC6300	WL SHIELD	LB80NTU/E/EA, LB75NTU/E/EA
46	TUCX5242	BASE METAL	
47	TUCX5243	A-PCB EARTH METAL	
48	TUXE323	WL -PCB EARTH METAL	
49	TUXX511	POWER CASE (UPPER)	△
50	TUXX512	POWER CASE (BOTTOM)	△
	TXAWC01VKG7	INLET ASSY	△
52	TXFEC98VKG7	ANALYSIS BLOCK	△ LB80NTU/E/EA, LB80U/E/EA
	TXFEC98VKG8	ANALYSIS BLOCK	△ LB75NTU/E/EA, LB80U/E/EA
53	TXFEC99VKG7A	OPTICAL BLOCK A	△ LB80NTU/E/EA, LB80U/E/EA
	TXFEC99VKG8A	OPTICAL BLOCK A	△ LB75NTU/E/EA, LB75U/E/EA
	TXFEC99VKG7B	OPTICAL BLOCK B	△ LB80NTU/E/EA, LB80U/E/EA
	TXFEC99VKG8B	OPTICAL BLOCK B	△ LB75NTU/E/EA, LB75U/E/EA
	TXFEW01VKB9	LAN CRAD (SDIO)	△
54	TXFKF98QPRZ	BOTTOM COVER	△ LB80NTU
	TXFKF98QQFZ	BOTTOM COVER	△ LB80NTE
	TXFKF98QQMZ	BOTTOM COVER	△ LB80NTEA
	TXFKF98QQBZ	BOTTOM COVER	△ LB75NTU
	TXFKF98QQHZ	BOTTOM COVER	△ LB75NTE
	TXFKF98QQPZ	BOTTOM COVER	△ LB75NTEA
	TXFKF98QQAZ	BOTTOM COVER	△ LB80U
	TXFKF98QQGZ	BOTTOM COVER	△ LB80E
	TXFKF98QQNZ	BOTTOM COVER	△ LB80EA
	TXFKF98QQCZ	BOTTOM COVER	△ LB75U
	TXFKF98QQJZ	BOTTOM COVER	△ LB75E
	TXFKF98QQQZ	BOTTOM COVER	△ LB75EA
55	TXFKF99QPRZ	UPPER COVER	△ LB80NTU/E/EA
	TXFKF99QQBZ	UPPER COVER	△ LB75NTU/E/EA
	TXFKF99QQAZ	UPPER COVER	△ LB80U/E/EA
	TXFKF99QQCZ	UPPER COVER	△ LB75U/E/EA
56	TXFKL99QPRZ	LAMP COVER ASSY	△
57	TXFKL02VKG7	LENS COVER ASSY	
58	TXFKP01VKG7	TERMINAL COVER ASSY	△
	TXFMK01VKG7	BASE SHEET ASSY	

Ref. No.	Part No.	Part Name & Description	Remarks
59	TXFMZ01VKG7	INHALATION FILTER ASSY	△
73	TXFQB02VKG7	CD-ROM ASSY	△ LB80NTU/E/EA, LB75NTU/E/EA
	TXJ/B1VKG7	B1 CABLE	△
	TXJ/E1VKD3	EARTH LEAD	△
	TXJ/K1VKG7	K1-KP CABLE	△
	TXJ/K2VKG7	K2 CABLE	△
	TXJ/M1VKG7	M1 CABLE	△
	TXJ/M2VKG7	M2 CABLE	△
	TXJ/M3VKG7	M3 CABLE	△
	TXJ/P1VKG7	P1 CABLE	△
	TXJ/P3VKG7	P3 CABLE	△
	TXJ/Q3VKG7	Q3 CABLE	△
	TXJ/Z1VKG7-1	Z1 CABLE	△
60	TXZKG03VKG7	POLARIZING PLATE/IN (G) ASSY	LB80NTU/E/EA, LB80U/E/EA
	TXZKG03VKG8	POLARIZING PLATE/IN (G) ASSY	LB75NTU/E/EA, LB75U/E/EA
	XSB3+10FN	SCREW	
61	XSB3+8FN	SCREW	
62	XTB3+10CFN	SCREW	
	XTBT969FJK	SCREW	
	XTV3+12GFJ	SCREW	
	XTW3+8PFJ	SCREW	
	XYC3+FG10FJK	SCREW	
	XYN2+F10FJ	SCREW	
	XYN2+F6FJ	SCREW	
	XYN3+F10FJK	SCREW	
	XYN3+F12FJ	SCREW	
	XYN3+F25FJ	SCREW	
	XYN3+F6FJ	SCREW	
	XYN3+F8FJ	SCREW	
	XYN3+J10FJ	SCREW	
	XYN3+J12FJ	SCREW	
	XYN3+J8FJ	SCREW	
	XYN4+E8FJ	SCREW	
	XZB15X32C05	POLY BAG	
[INTEGRATED CIRCUIT]			
IC1001	C1AB00002665	I.C	
IC1002	C3EBCC000052	I.C	
IC1005	C1AB00002684	I.C	
IC1006	C3ABPJ000065	I.C	
IC1011	TVRP748-1	I.C	
IC1016	C0EBE0000348	I.C	
IC1017	C3EBJC000055	I.C	
IC1018	C1ZBZ0003829	I.C	
IC1019	C0CBCAC00096	I.C	
IC1020	C0JBAZ001876	I.C	
IC1021	C0JBAA000340	I.C	
IC1022	C0JBAA000315	I.C	
IC1023	C0DBEJC00002	I.C	
IC1024	C3EBCC000052	I.C	
IC1025	C0JBAZ002743	I.C	
IC1026	C1AB00002548	I.C	
IC1027	C0CBCAG00015	I.C	
IC1028	C0DBCYY00028	I.C	
IC1029	C0DBEKG00004	I.C	
IC1041	C0DBZHD00013	I.C	
IC1042	C0DBZGF00002	I.C	
IC1043	C0CBCAD00015	I.C	
IC1051	C1AB00002607	I.C	
IC1052	C1AB00002607	I.C	
IC1053	C1AB00002607	I.C	
IC1054	C1AB00002766	I.C	
IC1055	C1AB00002766	I.C	
IC1056	C1AB00002766	I.C	
IC1060	C0ABZA000068	I.C	
IC1061	C0JBAA000345	I.C	
IC1070	C0ZBZ0001361	I.C	
IC1072	C0CBAYY00005	I.C	

Ref. No.	Part No.	Part Name & Description	Remarks
IC1080	C0JBAR000282	I.C	LB80NTU, LB75NTU, LB80U, LB75U
IC1083	C0ZBZ0001627	I.C	
IC1085	C0DBGHC00002	I.C	
IC1092	C0GBY0000052	I.C	
IC1097	C2BBYY000516	I.C	LB80NTU, LB75NTU, LB80U, LB75U
IC1098	C0JBAE000354	I.C	LB80NTU, LB75NTU, LB80U, LB75U
IC1099	C0JBAE000354	I.C	LB80NTU, LB75NTU, LB80U, LB75U
IC1100	C1AB00001145	I.C	LB80NTU, LB75NTU, LB80U, LB75U
IC1101	C0JBAZ002069	I.C	
IC1102	C0JBAZ002069	I.C	
IC1103	C0DBEKG00004	I.C	
IC1104	C0DBEKG00004	I.C	
IC1105	C0DBAYY00397	I.C	
IC1106	C0DBEKG00004	I.C	
IC1107	C0DBAYY00397	I.C	
IC1109	C1AB00001604	I.C	LB80NTU, LB75NTU, LB80U, LB75U
IC1110	C0JBAZ002743	I.C	LB80NTU, LB75NTU, LB80U, LB75U
IC1111	C0DBZHD00013	I.C	
IC1112	C0JBAA000345	I.C	
IC1113	C0JBAA000345	I.C	
IC1200	C1AB00002806	I.C	
IC1204	C0ABBA000229	I.C	
IC1500	C0JBAR000367	I.C	
IC1501	C1AB00002428	I.C	
IC1502	C0JBAR000370	I.C	
IC1802	TVRP750-1	I.C	LB80NTU/E/EA, LB75NTU/E/EA
IC1803	C2GBC0000205	I.C	LB80NTU/E/EA, LB75NTU/E/EA
IC1804	C0DBEYG00002	I.C	LB80NTU/E/EA, LB75NTU/E/EA
IC1805	C0FBBK000066	I.C	LB80NTU/E/EA, LB75NTU/E/EA
IC1806	C0JBAZ002347	I.C	LB80NTU/E/EA, LB75NTU/E/EA
IC1807	C0JBAF000736	I.C	LB80NTU/E/EA, LB75NTU/E/EA
IC1808	C3ABQY000043	I.C	LB80NTU/E/EA, LB75NTU/E/EA
IC1809	C3ABQY000043	I.C	LB80NTU/E/EA, LB75NTU/E/EA
IC1810	C0EY0000242	I.C	LB80NTU/E/EA, LB75NTU/E/EA
IC9602	C0ZBZ0001462	I.C (B-PCB)	
IC9603	C0ZBZ0001462	I.C (B-PCB)	
[TRANSISTORS]			
Q1000	B1ABDF000018	TRANSISTOR	
Q1001	B1ABDF000018	TRANSISTOR	
Q1002	B1ABDF000018	TRANSISTOR	
Q1003	B1ABDF000018	TRANSISTOR	
Q1004	B1GBCFLM0003	TRANSISTOR	
Q1005	2SB0710AWL	TRANSISTOR	
Q1006	B1DFED000017	TRANSISTOR	
Q1007	B1GBCFLM0003	TRANSISTOR	
Q1008	B1GBCFLM0039	TRANSISTOR	
Q1009	B1CHQD000001	TRANSISTOR	
Q1010	B1ABDF000018	TRANSISTOR	
Q1011	B1ABDF000018	TRANSISTOR	
Q1012	B1GBCFJJ0007	TRANSISTOR	
Q1013	B1ADCE000013	TRANSISTOR	
Q1014	B1ABDF000018	TRANSISTOR	

Ref. No.	Part No.	Part Name & Description	Remarks
Q1015	BIABDF000018	TRANSISTOR	
Q1016	BIABDF000018	TRANSISTOR	
Q1017	BIADCFJJ0008	TRANSISTOR	
Q1018	BIABDF000018	TRANSISTOR	
Q1019	BIADCF000063	TRANSISTOR	LB80NTU, LB75NTU, LB80U, LB75U
Q1020	BIGBCFJJ0007	TRANSISTOR	LB80NTU, LB75NTU, LB80U, LB75U
Q1021	BIGBCFJJ0007	TRANSISTOR	LB80NTU, LB75NTU, LB80U, LB75U
Q1022	BIGBCFJJ0007	TRANSISTOR	LB80NTU, LB75NTU, LB80U, LB75U
Q1023	BIGBCFJJ0007	TRANSISTOR	LB80NTU, LB75NTU, LB80U, LB75U
Q1024	BIGBCFJJ0007	TRANSISTOR	LB80NTU, LB75NTU, LB80U, LB75U
Q1025	2SB1218A0L	TRANSISTOR	
Q1027	BIADCF000063	TRANSISTOR	LB80NTU, LB75NTU, LB80U, LB75U
Q1028	BIGBCFJJ0007	TRANSISTOR	LB80NTU, LB75NTU, LB80U, LB75U
Q1029	BIABDF000018	TRANSISTOR	LB80NTU, LB75NTU, LB80U, LB75U
Q1030	BIABDF000018	TRANSISTOR	LB80NTU, LB75NTU, LB80U, LB75U
Q1031	BIADCF000063	TRANSISTOR	LB80NTU, LB75NTU, LB80U, LB75U
Q1032	BIGBCFLM0003	TRANSISTOR	
Q1033	BIGBCFLM0003	TRANSISTOR	
Q1036	2SD1819A0L	TRANSISTOR	
Q1037	BIGBCFLM0003	TRANSISTOR	
Q1050	BIGBCFJJ0007	TRANSISTOR	
Q1051	2SD1819A0L	TRANSISTOR	
Q1052	2SD1819A0L	TRANSISTOR	
Q1053	2SD1819A0L	TRANSISTOR	
Q1054	BIGBCFLM0003	TRANSISTOR	
Q1056	BIADCE000013	TRANSISTOR	
Q1057	BIADCE000013	TRANSISTOR	
Q1058	2SD19790SL	TRANSISTOR	
Q1059	2SD19790SL	TRANSISTOR	
Q1600	BIABBB000089	TRANSISTOR	
Q1601	BIABBB000089	TRANSISTOR	
Q1602	BIABBB000089	TRANSISTOR	
Q9601	2SD1819A0L	TRANSISTOR (B-PCB)	
Q9602	2SB1218A0L	TRANSISTOR (B-PCB)	
Q9603	BICERQ000038	TRANSISTOR (B-PCB)	
Q9604	2SB0710AWL	TRANSISTOR (B-PCB)	
Q9605	2SB0710AWL	TRANSISTOR (B-PCB)	
Q9606	BICERM000016	TRANSISTOR (B-PCB)	
Q9607	BICERM000016	TRANSISTOR (B-PCB)	
Q9608	2SB0710AWL	TRANSISTOR (B-PCB)	
Q9609	2SB0710AWL	TRANSISTOR (B-PCB)	
Q9610	BICERM000016	TRANSISTOR (B-PCB)	
Q9611	BICERM000016	TRANSISTOR (B-PCB)	
Q9614	BICERQ000038	TRANSISTOR (B-PCB)	
[DIODES]			
D1000	MAZ81500ML	DIODE	
D1001	MAZ81500ML	DIODE	
D1002	MAZ81500ML	DIODE	
D1003	MAZ81500ML	DIODE	
D1004	MAZ80560ML	DIODE	
D1006	MAZ80560ML	DIODE	
D1007	MAZ80560ML	DIODE	
D1008	MAZ80560ML	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
D1009	MA3S1370GL	DIODE	
D1010	MA3S1370GL	DIODE	
D1011	MA3S1370GL	DIODE	
D1012	MAZ80560ML	DIODE	
D1013	MAZ80560ML	DIODE	
D1015	B0JCPD000026	DIODE	
D1016	B0JCPD000026	DIODE	
D1022	MA721TX	DIODE	
D1023	MA721TX	DIODE	
D1028	MA3X157A0L	DIODE	
D1029	B0JCME000076	DIODE	
D1030	B0JCPD000026	DIODE	
D1031	MA2J11300L	DIODE	
D1032	B0JCME000076	DIODE	
D1033	B0JCPD000026	DIODE	
D1034	MA2J11300L	DIODE	
D1035	B0ECKP000047	DIODE	
D1600	MA3S1370GL	DIODE	
D1601	MA3S1370GL	DIODE	
D1602	MA3S1370GL	DIODE	
D1603	MA3S1370GL	DIODE	
D1604	MA3S1370GL	DIODE	
D5001	B0BC01000033	DIODE	
D5002	B0HCOMM000013	DIODE	
D9101	D4EAY4710001	DIODE	△
D9601	B0HASR000006	DIODE (B-PCB)	
D9604	B0ACEM000012	DIODE (B-PCB)	
D9605	B0JCME000076	DIODE (B-PCB)	
D9606	B0ACEM000012	DIODE (B-PCB)	
D9607	B0JCME000076	DIODE (B-PCB)	
D9608	B0ACEM000012	DIODE (B-PCB)	
D9609	B0JCME000076	DIODE (B-PCB)	
D9611	B0ACEM000012	DIODE (B-PCB)	
D9612	B0JCME000076	DIODE (B-PCB)	
D9616	B0ECKP000047	DIODE (B-PCB)	
D9617	B0JCME000076	DIODE (B-PCB)	
D9618	B0JCME000076	DIODE (B-PCB)	
D9619	B0JCME000076	DIODE (B-PCB)	
D9620	B0JCME000076	DIODE (B-PCB)	
D9621	B0JCME000076	DIODE (B-PCB)	
D9622	B0ECKP000047	DIODE (B-PCB)	
D9623	B0ECKP000047	DIODE (B-PCB)	
D9624	B0JCME000076	DIODE (B-PCB)	
D9625	B0JCME000076	DIODE (B-PCB)	
D9626	B0JCME000076	DIODE (B-PCB)	
D9627	B0JCME000076	DIODE (B-PCB)	
D9628	B0JCME000076	DIODE (B-PCB)	
D9629	B0ECKP000047	DIODE (B-PCB)	
[COILS]			
L1000	J0JJC0000022	EMI FILTER	
L1001	J0JJC0000022	EMI FILTER	
L1002	J0JJC0000022	EMI FILTER	
L1003	GLCR10K00010	FILTER	
L1004	J0JJC0000022	EMI FILTER	
L1005	J0JCC0000168	FILTER	
L1006	J0JCC0000168	FILTER	
L1007	J0JCC0000168	FILTER	
L1008	J0JCC0000168	FILTER	
L1009	J0JCC0000168	FILTER	
L1010	J0JCC0000168	FILTER	
L1011	J0JJC0000022	EMI FILTER	
L1012	J0JCC0000168	FILTER	
L1013	J0JCC0000168	FILTER	
L1014	J0JJC0000022	EMI FILTER	
L1015	J0JJC0000022	EMI FILTER	
L1016	J0JJC0000022	EMI FILTER	
L1017	ELJFA470JFB	COIL	
L1018	ELJFA470JFB	COIL	
L1019	ELJFA470JFB	COIL	
L1020	ELJFA470JFB	COIL	
L1021	J0JYC0000019	FILTER	

Ref. No.	Part No.	Part Name & Description	Remarks
L1023	J0JGC0000059	FILTER	
L1025	J0JGC0000059	FILTER	
L1026	J0JJC0000022	EMI FILTER	
L1027	J0JJC0000022	EMI FILTER	
L1028	J0JJC0000022	EMI FILTER	
L1029	J0JJC0000022	EMI FILTER	
L1030	J0JJC0000022	EMI FILTER	
L1031	J0JJC0000022	EMI FILTER	
L1033	J0JJC0000022	EMI FILTER	
L1034	J0JJC0000022	EMI FILTER	
L1035	J0JJC0000022	EMI FILTER	LB80NTU, LB75NTU, LB80U, LB75U
L1036	J0JJC0000022	EMI FILTER	
L1037	J0JJC0000022	EMI FILTER	
L1038	J0JJC0000022	EMI FILTER	
L1039	J0JCC0000168	FILTER	
L1040	J0JCC0000168	FILTER	
L1041	J0JCC0000168	FILTER	
L1042	J0JCC0000168	FILTER	
L1043	J0JCC0000168	FILTER	
L1044	J0JJC0000022	EMI FILTER	
L1045	J0JJC0000022	EMI FILTER	
L1046	J0JJC0000022	EMI FILTER	
L1047	J0JBC0000116	EMI FILTER	
L1048	J0JBC0000116	EMI FILTER	
L1049	D0YAR0000007	RESISTOR	
L1051	J0JCC0000168	FILTER	
L1052	J0JCC0000168	FILTER	
L1053	J0JJC0000022	EMI FILTER	
L1054	J0JJC0000022	EMI FILTER	
L1055	J0JJC0000022	EMI FILTER	
L1056	J0JJC0000022	EMI FILTER	
L1057	J0JBC0000086	EMI FILTER	
L1058	J0JJC0000022	EMI FILTER	
L1059	J0JJC0000022	EMI FILTER	
L1060	J0JJC0000022	EMI FILTER	
L1061	J0JJC0000022	EMI FILTER	
L1062	J0JJC0000022	EMI FILTER	
L1063	J0JJC0000022	EMI FILTER	
L1064	J0JJC0000022	EMI FILTER	
L1065	J0JJC0000022	EMI FILTER	
L1066	J0JJC0000022	EMI FILTER	
L1067	J0JJC0000022	EMI FILTER	
L1068	G1C470MA0291	FILTER	
L1069	G1C470MA0291	FILTER	
L1500	J0JCC0000168	FILTER	
L1501	J0JCC0000168	FILTER	
L1502	J0JCC0000168	FILTER	
L1503	J0JCC0000168	FILTER	
L1802	J0JHC0000107	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
L1803	J0JHC0000107	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
L1804	J0JHC0000107	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
L1805	J0JHC0000107	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
L1806	J0JHC0000107	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
L1807	J0JHC0000107	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
L1808	J0JHC0000107	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
L1809	J0JHC0000107	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
L9101	EXCELDR35C	BEAD CORE	
L9102	EXCELDR35C	BEAD CORE	
FL1000	J0HAAB000058	FILTER	
FL1001	J0HAAB000058	FILTER	
FL1002	J0HAYY000012	FILTER	
FL1003	J0HAYY000012	FILTER	
FL1004	J0HAYY000012	FILTER	
FL1005	J0HAYY000012	FILTER	
FL1006	J0HAYY000012	FILTER	

Ref. No.	Part No.	Part Name & Description	Remarks
FL1007	J0HAYY000012	FILTER	
FL1008	J0HAYY000012	FILTER	
FL1009	J0HAYY000012	FILTER	
FL1010	J0HAYY000012	FILTER	
FL1011	J0HAYY000012	FILTER	
FL1012	J0HAYY000012	FILTER	
FL1014	J0HAYY000012	FILTER	
FL1015	J0HAYY000012	FILTER	
FL1801	J0HABC000010	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
FL1804	J0HABC000010	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
FL1806	J0HAYY000057	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
FL1807	J0HAYY000057	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
FL1808	J0HAYY000057	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
FL1809	J0HAYY000057	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
FL1810	J0HAYY000057	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
FL1811	J0HAYY000057	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
FL1812	J0HAYY000057	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
FL1813	J0HAYY000057	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
FL1814	J0HAYY000057	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
FL1816	J0HABC000010	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
FL1817	J0HAYY000012	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
FL1818	J0HAYY000012	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
[RESISTORS]			
R1003	ERJ2GEJ560	M 56 OHM, 0.063W	
R1004	D0YAR0000007	RESISTOR	
R1005	ERJ2GEJ560	M 56 OHM, 0.063W	
R1006	D0YAR0000007	RESISTOR	
R1007	ERJ2GEJ560	M 56 OHM, 0.063W	
R1008	ERJ2GEJ560	M 56 OHM, 0.063W	
R1009	EXB28V560J	RESISTOR ARRAY	
R1012	EXB28V470J	RESISTOR ARRAY	
R1013	EXB28V470J	RESISTOR ARRAY	
R1014	EXB28V470J	RESISTOR ARRAY	
R1015	EXB28V470J	RESISTOR ARRAY	
R1017	ERJ2GEJ220	M 22 OHM, 0.063W	
R1018	ERJ2GEJ220	M 22 OHM, 0.063W	
R1019	ERJ2GEJ220	M 22 OHM, 0.063W	
R1020	ERJ2GEJ220	M 22 OHM, 0.063W	
R1021	ERJ2GEJ220	M 22 OHM, 0.063W	
R1022	ERJ2GEJ220	M 22 OHM, 0.063W	
R1023	ERJ2GEJ104	M100K OHM, 0.063W	
R1024	ERJ2GEJ220	M 22 OHM, 0.063W	
R1025	ERJ2GEJ220	M 22 OHM, 0.063W	
R1026	ERJ2GEJ220	M 22 OHM, 0.063W	
R1027	ERJ2GEJ220	M 22 OHM, 0.063W	
R1029	D0YAR0000007	RESISTOR	
R1030	ERJ2GEJ220	M 22 OHM, 0.063W	
R1031	ERJ2GEJ220	M 22 OHM, 0.063W	
R1032	ERJ2GEJ104	M100K OHM, 0.063W	
R1033	D0YAR0000007	RESISTOR	
R1036	ERJ2GEJ220	M 22 OHM, 0.063W	
R1037	ERJ2GEJ220	M 22 OHM, 0.063W	
R1038	ERJ2GEJ220	M 22 OHM, 0.063W	
R1039	ERJ2GEJ220	M 22 OHM, 0.063W	
R1040	ERJ2GEJ220	M 22 OHM, 0.063W	
R1041	ERJ2GEJ220	M 22 OHM, 0.063W	
R1042	ERJ2GEJ104	M100K OHM, 0.063W	
R1043	ERJ2GEJ102	M 1K OHM, 0.063W	
R1044	ERJ2GEJ102	M 1K OHM, 0.063W	
R1045	ERJ3EKF1002	M 10KOHM, 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R1047	D0YAR0000007	RESISTOR	
R1048	ERJ3EKF1473	M 147KOHM, 0.063W	
R1049	ERJ2GEJ102	M 1K OHM, 0.063W	
R1050	D0YAR0000007	RESISTOR	
R1051	ERJ2GEJ220	M 22 OHM, 0.063W	
R1052	ERJ2GEJ220	M 22 OHM, 0.063W	
R1053	ERJ2GEJ220	M 22 OHM, 0.063W	
R1056	ERJ2GEJ104	M100K OHM, 0.063W	
R1058	ERJ2GEJ473	M 47K OHM, 0.063W	
R1059	ERJ2GEJ473	M 47K OHM, 0.063W	
R1060	ERJ2GEJ473	M 47K OHM, 0.063W	
R1061	D0YAR0000007	RESISTOR	
R1062	D0YAR0000007	RESISTOR	
R1063	D0YAR0000007	RESISTOR	
R1064	ERJ2GEJ470	M 47 OHM, 0.063W	
R1065	ERJ3GEYJ101	M 100 OHM, J, 1/16W	
R1066	ERJ3GEYJ101	M 100 OHM, J, 1/16W	
R1067	ERJ2GEJ100	M 10 OHM, 0.063W	
R1068	ERJ2GEJ100	M 10 OHM, 0.063W	
R1069	ERJ2GEJ100	M 10 OHM, 0.063W	
R1074	ERJ2GEJ333	M 33K OHM, 0.063W	
R1075	EXB28V470J	RESISTOR ARRAY	
R1076	ERJ2GEJ104	M100K OHM, 0.063W	
R1077	ERJ2GEJ104	M100K OHM, 0.063W	
R1078	ERJ2GEJ104	M100K OHM, 0.063W	
R1079	D0YAR0000007	RESISTOR	
R1080	EXB28V470J	RESISTOR ARRAY	
R1081	ERJ2GEJ104	M100K OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1088	ERJ3EKF1203	M 120KOHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1089	EXB28V470J	RESISTOR ARRAY	
R1090	ERJ3EKF1002	M 10KOHM, 1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1091	EXB28V470J	RESISTOR ARRAY	
R1092	EXB28V470J	RESISTOR ARRAY	
R1094	ERJ3GEY0R00	M 0 OHM, 1/16W	
R1095	EXB28V470J	RESISTOR ARRAY	
R1096	EXB28V470J	RESISTOR ARRAY	
R1097	EXB28V470J	RESISTOR ARRAY	
R1098	EXB28V470J	RESISTOR ARRAY	
R1099	EXB28V470J	RESISTOR ARRAY	
R1100	EXB28V470J	RESISTOR ARRAY	
R1101	ERJ2GEJ470	M 47 OHM, 0.063W	
R1102	EXB28V470J	RESISTOR ARRAY	
R1103	ERJ2GEJ470	M 47 OHM, 0.063W	
R1104	EXB28V470J	RESISTOR ARRAY	
R1105	ERJ2GEJ470	M 47 OHM, 0.063W	
R1106	EXB28V470J	RESISTOR ARRAY	
R1107	EXB28V470J	RESISTOR ARRAY	
R1108	ERJ2GEJ104	M100K OHM, 0.063W	
R1109	ERJ2GEJ104	M100K OHM, 0.063W	
R1110	ERJ2GEJ103	M 10K OHM, 0.063W	
R1111	ERJ2GEJ152	M 1.5K OHM, 0.063W	
R1112	ERJ2GEJ104	M100K OHM, 0.063W	
R1113	ERJ2GEJ333	M 33K OHM, 0.063W	
R1114	ERJ3GEY0R00	M 0 OHM, 1/16W	
R1115	ERJ3GEYJ331	M 330 OHM, J, 1/16W	
R1116	ERJ3GEYJ222	M 2.2KOHM, J, 1/16W	
R1118	ERJ3EKF4703	M 470KOHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1119	D0YAR0000007	RESISTOR	
R1120	ERJ3EKF4703	M 470KOHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1122	ERJ2GEJ331	M 330 OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1123	ERJ2GEJ333	M 33K OHM, 0.063W	
R1124	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	
R1125	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R1126	ERJ3GEYJ203	M 20KOHM, J, 1/16W	
R1127	ERJ6GEYG221	M 220 OHM, J, 1/10W	
R1128	ERJ6GEYG221	M 220 OHM, J, 1/10W	
R1129	ERJ3GEYJ331	M 330 OHM, J, 1/16W	
R1131	ERJ8ENF1500	M 150 OHM, F, 1/8W	
R1133	ERJ8ENF1500	M 150 OHM, F, 1/8W	
R1134	ERJ8ENF1500	M 150 OHM, F, 1/8W	
R1135	ERJ2GEJ100	M 10 OHM, 0.063W	
R1136	ERJ8ENF75R0	M 75 OHM, F, 1/8W	
R1137	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	
R1138	ERJ3GEYJ562	M 5.6KOHM, J, 1/16W	
R1139	ERJ3GEYJ473	M 47KOHM, J, 1/16W	
R1140	ERJ3GEYJ560	M 56 OHM, J, 1/16W	
R1141	ERJ8ENF1500	M 150 OHM, F, 1/8W	
R1142	ERJ8ENF1500	M 150 OHM, F, 1/8W	
R1143	ERJ8ENF1500	M 150 OHM, F, 1/8W	
R1144	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R1145	ERJ8ENF75R0	M 75 OHM, F, 1/8W	
R1146	ERJ3GEYJ104	M 100KOHM, J, 1/16W	
R1147	ERJ3GEYJ471	M 470 OHM, J, 1/16W	
R1148	ERJ3GEYJ330	M 33 OHM, J, 1/16W	
R1149	ERJ3GEYJ330	M 33 OHM, J, 1/16W	
R1150	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	
R1151	ERJ3GEYJ562	M 5.6KOHM, J, 1/16W	
R1152	ERJ8ENF75R0	M 75 OHM, F, 1/8W	
R1153	ERJ3GEYJ560	M 56 OHM, J, 1/16W	
R1154	ERJ3GEYJ471	M 470 OHM, J, 1/16W	
R1155	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R1156	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R1157	ERJ3GEYJ560	M 56 OHM, J, 1/16W	
R1158	ERJ3GEYJ682	M 6.8KOHM, J, 1/16W	
R1159	ERJ3GEYJ332	M 3.3KOHM, J, 1/16W	
R1160	ERJ3GEYJ471	M 470 OHM, J, 1/16W	
R1161	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R1162	ERJ3GEYJ223	M 22KOHM, J, 1/16W	
R1163	ERJ3GEYJ821	M 820 OHM, J, 1/16W	
R1164	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R1165	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R1166	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R1167	ERJ3GEYJ393	M 39KOHM, J, 1/16W	
R1168	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R1169	ERJ3GEYJ393	M 39KOHM, J, 1/16W	
R1170	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1171	ERJ2GEJ101	M 100 OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1172	ERJ3GEYJ471	M 470 OHM, J, 1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1173	ERJ1TYJ221U	M 220 OHM, 1W	
R1174	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R1175	ERJ3GEYJ473	M 47KOHM, J, 1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1176	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1177	ERJ2GEJ102	M 1K OHM, 0.063W	
R1178	EXB28V220J	RESISTOR ARRAY	LB80NTU, LB75NTU, LB80U, LB75U
R1179	ERJ3GEYJ562	M 5.6KOHM, J, 1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1180	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R1181	ERJ3GEYJ223	M 22KOHM, J, 1/16W	
R1182	ERJ3GEYJ221	M 220 OHM, J, 1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1183	ERJ2GEJ104	M100K OHM, 0.063W	
R1184	ERJ3GEYJ471	M 470 OHM, J, 1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1185	ERJ2GEJ152	M 1.5K OHM, 0.063W	

Ref. No.	Part No.	Part Name & Description	Remarks
R1186	ERJ3GEYJ180	M 18 OHM,J,1/16W	
R1187	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R1188	ERJ3GEYJ180	M 18 OHM,J,1/16W	
R1189	ERJ2GEJ220	M 22 OHM, 0.063W	
R1192	ERJ3GEYJ180	M 18 OHM,J,1/16W	
R1193	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	
R1194	ERJ2GEJ223	M 22KOHM, 0.063W	
R1195	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	
R1196	ERJ3GEYJ105	M 1M OHM,J,1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1201	ERJ2GEJ220	M 22 OHM, 0.063W	
R1202	ERJ2GEJ471	M 470 OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1204	D0GB394JA057	RESISTOR	LB80NTU, LB75NTU, LB80U, LB75U
R1205	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R1206	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R1207	ERJ3GEYJ180	M 18 OHM,J,1/16W	
R1208	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R1209	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R1212	ERJ2GEJ103	M 10K OHM, 0.063W	
R1213	ERJ2GEJ220	M 22 OHM, 0.063W	
R1214	ERJ2GEJ220	M 22 OHM, 0.063W	
R1215	ERJ2GEJ220	M 22 OHM, 0.063W	
R1216	ERJ2GEJ220	M 22 OHM, 0.063W	
R1218	ERJ2GEJ152	M 1.5K OHM, 0.063W	
R1219	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1220	ERJ2GEJ103	M 10K OHM, 0.063W	
R1221	ERJ3GEYJ180	M 18 OHM,J,1/16W	
R1222	ERJ3GEYJ180	M 18 OHM,J,1/16W	
R1223	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1224	ERJ2GEJ273	M 27K OHM, 0.063W	
R1226	ERJ2GEJ101	M 100 OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1227	ERJ2GEJ104	M100K OHM, 0.063W	
R1228	ERJ2GEJ220	M 22 OHM, 0.063W	
R1229	ERJ2GEJ220	M 22 OHM, 0.063W	
R1230	ERJ2GEJ102	M 1K OHM, 0.063W	
R1231	ERJ3EKF1371	M 1.37KOHM,0.063W	
R1232	ERJ2GEJ220	M 22 OHM, 0.063W	
R1233	ERJ3GEYJ221	M 220 OHM,J,1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1234	ERJ2GEJ152	M 1.5K OHM, 0.063W	
R1235	ERJ2GEJ102	M 1K OHM, 0.063W	
R1236	ERJ3GEYJ471	M 470 OHM,J,1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1237	ERJ2GEJ103	M 10K OHM, 0.063W	
R1238	ERJ3EKF1691	M1.69KOHM, 1/16W	
R1239	D0YAR0000007	RESISTOR	
R1240	ERJ2GEJ273	M 27K OHM, 0.063W	
R1241	ERJ3EKF1004	M100KOHM, 0.063W	
R1242	ERJ2GEJ220	M 22 OHM, 0.063W	
R1243	ERJ2GEJ560	M 56 OHM, 0.063W	
R1244	ERJ2GEJ220	M 22 OHM, 0.063W	
R1246	ERJ2GEJ103	M 10K OHM, 0.063W	
R1247	ERJ3GEYJ471	M 470 OHM,J,1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1248	ERJ3GEY0R00	M 0 OHM, 1/16W	
R1249	ERJ2GEJ101	M 100 OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1250	ERJ2GEJ104	M100K OHM, 0.063W	
R1251	ERJ2GEJ220	M 22 OHM, 0.063W	
R1252	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U

Ref. No.	Part No.	Part Name & Description	Remarks
R1254	ERJ3GEYJ333	M 33KOHM,J,1/16W	
R1255	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R1256	ERJ3GEYJ333	M 33KOHM,J,1/16W	
R1257	ERJ3GEYJ333	M 33KOHM,J,1/16W	
R1258	ERJ2GEJ333	M 33K OHM, 0.063W	
R1259	ERJ2GEJ330	M 33 OHM, 0.063W	
R1260	EXB28V560J	RESISTOR ARRAY	
R1261	EXB2HV560JV	RESISTOR ARRAY	
R1262	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1263	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1264	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R1265	ERJ2GE0R00	M 0 OHM, 0.063W	LB80NTE/EA, LB75NTE/EA, LB80E/EA, LB75E/EA
R1267	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R1268	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1270	EXB2HV560JV	RESISTOR ARRAY	
R1271	EXB28V560J	RESISTOR ARRAY	
R1272	ERJ2GEJ220	M 22 OHM, 0.063W	
R1273	ERJ2GEJ472	M4.7K OHM, 0.063W	
R1274	ERJ2GEJ472	M4.7K OHM, 0.063W	
R1276	ERJ2GEJ102	M 1K OHM, 0.063W	
R1277	ERJ2GEJ473	M 47K OHM, 0.063W	
R1279	ERJ3GEYJ105	M 1M OHM,J,1/16W	
R1280	ERJ3GEYJ561	M 560 OHM,J,1/16W	
R1281	ERJ1TYJ221U	M 220 OHM, 1W	
R1282	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R1283	ERJ2GEJ472	M4.7K OHM, 0.063W	
R1284	ERJ2GEJ472	M4.7K OHM, 0.063W	
R1285	ERJ2GEJ103	M 10K OHM, 0.063W	
R1286	ERJ2GEJ103	M 10K OHM, 0.063W	
R1287	ERJ2GEJ103	M 10K OHM, 0.063W	
R1288	ERJ2GEJ472	M4.7K OHM, 0.063W	
R1291	ERJ2GEJ103	M 10K OHM, 0.063W	
R1292	ERJ2GEJ101	M 100 OHM, 0.063W	
R1293	ERJ2GEJ103	M 10K OHM, 0.063W	
R1294	ERJ2GEJ562	M5.6K OHM, 0.063W	
R1295	ERJ1TYJ221U	M 220 OHM, 1W	
R1296	ERJ6GEYJ100	M 10 OHM,J,1/10W	
R1297	ERJ6GEYJ560	M 56 OHM,J,1/10W	
R1298	ERJ6ENF6801	M 6.8KOHM, 1/10W	
R1299	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R1300	ERJ2GEJ562	M5.6K OHM, 0.063W	
R1301	ERJ2GEJ104	M100K OHM, 0.063W	
R1302	ERJ2GEJ104	M100K OHM, 0.063W	
R1303	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R1304	ERJ2GEJ560	M 56 OHM, 0.063W	
R1306	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R1307	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R1308	ERJ3GEYJ274	M270KOHM,J,1/16W	
R1309	ERJ3GEYJ473	M 47KOHM,J,1/16W	
R1310	ERJ6GEYG221	M 220 OHM,J,1/10W	
R1311	ERJ6GEYG221	M 220 OHM,J,1/10W	
R1312	ERJ3GEYJ473	M 47KOHM,J,1/16W	
R1313	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1314	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1315	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R1316	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R1317	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R1318	ERJ2GEJ681	M 680 OHM, 0.063W	
R1319	ERJ3GEYJ473	M 47KOHM,J,1/16W	
R1320	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1321	ERJ3GEYJ473	M 47KOHM,J,1/16W	
R1322	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R1323	ERJ2GEJ330	M 33 OHM, 0.063W	
R1325	ERJ2GEJ103	M 10K OHM, 0.063W	
R1326	EXB2HV103JV	RESISTOR ARRAY	
R1327	EXB2HV103JV	RESISTOR ARRAY	

Ref. No.	Part No.	Part Name & Description	Remarks
R1328	ERJ2GEJ103	M 10K OHM, 0.063W	
R1329	ERJ2GEJ102	M 1K OHM, 0.063W	
R1330	ERJ3GEYJ180	M 18 OHM, J, 1/16W	
R1331	ERJ3GEYJ180	M 18 OHM, J, 1/16W	
R1332	ERJ3GEYJ180	M 18 OHM, J, 1/16W	
R1333	ERJ2GEJ220	M 22 OHM, 0.063W	
R1334	ERJ2GEJ681	M 680 OHM, 0.063W	
R1336	ERJ3EKF4701	M 4.7KOHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1338	DOYAR0000007	RESISTOR	
R1339	DOYAR0000007	RESISTOR	
R1340	EXB2HV560JV	RESISTOR ARRAY	
R1341	EXB2HV560JV	RESISTOR ARRAY	
R1342	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R1343	ERJ3GEYJ680	M 68 OHM, J, 1/16W	
R1344	EXB2HV560JV	RESISTOR ARRAY	
R1345	ERJ3GEYJ680	M 68 OHM, J, 1/16W	
R1346	ERJ2GEJ101	M 100 OHM, 0.063W	
R1347	ERJ3GEYJ680	M 68 OHM, J, 1/16W	
R1348	ERJ2GEJ220	M 22 OHM, 0.063W	
R1349	EXB28V103J	RESISTOR ARRAY	
R1351	ERJ2GEJ223	M 22KOHM, 0.063W	
R1352	ERJ2GEJ333	M 33K OHM, 0.063W	
R1353	ERJ2GEJ102	M 1K OHM, 0.063W	
R1354	ERJ3GEYJ330	M 33 OHM, J, 1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1355	ERJ2GEJ473	M 47K OHM, 0.063W	
R1356	ERJ2GEJ103	M 10K OHM, 0.063W	
R1357	ERJ2GEJ103	M 10K OHM, 0.063W	
R1358	ERJ2GEJ101	M 100 OHM, 0.063W	
R1359	ERJ2GEJ333	M 33K OHM, 0.063W	
R1360	ERJ2GEJ103	M 10K OHM, 0.063W	
R1361	ERJ2GEJ562	M 5.6K OHM, 0.063W	
R1362	ERJ6GEYJ100	M 10 OHM, J, 1/10W	
R1363	ERJ2GEJ102	M 1K OHM, 0.063W	
R1364	ERJ6ENF6801	M 6.8KOHM, 1/10W	
R1370	ERJ2GEJ223	M 22KOHM, 0.063W	
R1372	DOYAR0000007	RESISTOR	
R1374	DOYAR0000007	RESISTOR	
R1375	DOYAR0000007	RESISTOR	
R1377	DOYAR0000007	RESISTOR	
R1379	ERJ1TYJ221U	M 220 OHM, 1W	
R1380	ERJ3EKF5601	M 5.6KOHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1381	ERJ3GEYJ152	M 1.5KOHM, J, 1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1382	EXB2HV680JV	RESISTOR ARRAY	
R1383	EXB2HV680JV	RESISTOR ARRAY	
R1384	EXB28V680J	RESISTOR ARRAY	
R1385	EXB2HV680JV	RESISTOR ARRAY	
R1386	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R1387	EXB28V680J	RESISTOR ARRAY	
R1388	EXB2HV560JV	RESISTOR ARRAY	
R1389	EXB2HV560JV	RESISTOR ARRAY	
R1390	EXB2HV680JV	RESISTOR ARRAY	
R1391	EXB2HV560JV	RESISTOR ARRAY	
R1392	ERJ2GEJ680	M 68 OHM, 0.063W	
R1393	EXB28V680J	RESISTOR ARRAY	
R1394	EXB2HV680JV	RESISTOR ARRAY	
R1395	DOYAR0000007	RESISTOR	
R1396	DOYAR0000007	RESISTOR	
R1398	DOYAR0000007	RESISTOR	
R1401	ERJ3GEYJ122	M 1.2KOHM, J, 1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1402	ERJ2GEJ180	M 18 OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1403	ERJ3GEYJ103	M 10K OHM, J, 1/16W	LB80NTU, LB75NTU, LB80U, LB75U

Ref. No.	Part No.	Part Name & Description	Remarks
R1404	ERJ3GEYJ103	M 10K OHM, J, 1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1405	ERJ2GEJ101	M 100 OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1406	ERJ3GEYJ471	M 470 OHM, J, 1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1407	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R1408	ERJ2GEJ472	M 4.7K OHM, 0.063W	
R1409	ERJ2GEJ472	M 4.7K OHM, 0.063W	
R1410	DOYAR0000007	RESISTOR	
R1411	ERJ2GEJ472	M 4.7K OHM, 0.063W	
R1412	ERJ2GE0R00	M 0 OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1413	ERJ3GEYJ101	M 100 OHM, J, 1/16W	
R1414	ERJ3GEYJ101	M 100 OHM, J, 1/16W	
R1416	ERJ2GEJ391	M 390 OHM, 0.063W	
R1417	ERJ2GEJ272	M 2.7K OHM, 0.063W	
R1418	ERJ2GEJ104	M 100K OHM, 0.063W	
R1419	ERJ3GEYJ563	M 56KOHM, J, 1/16W	
R1420	D0GB154JA057	RESISTOR	
R1421	ERJ2GEJ220	M 22 OHM, 0.063W	
R1422	ERJ2GEJ220	M 22 OHM, 0.063W	
R1423	ERJ3GEYJ333	M 33KOHM, J, 1/16W	
R1424	ERJ3GEYJ183	M 18KOHM, J, 1/16W	
R1426	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R1428	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R1429	ERJ3GEYJ183	M 18KOHM, J, 1/16W	
R1430	ERJ3GEYJ333	M 33KOHM, J, 1/16W	
R1431	ERJ3GEYJ563	M 56KOHM, J, 1/16W	
R1432	D0GB154JA057	RESISTOR	
R1433	DOYAR0000007	RESISTOR	
R1434	DOYAR0000007	RESISTOR	
R1437	DOYAR0000007	RESISTOR	
R1438	ERJ2GEJ101	M 100 OHM, 0.063W	
R1439	ERJ2GEJ122	M 1.2K OHM, 0.063W	
R1440	ERJ2GEJ330	M 33 OHM, 0.063W	
R1441	DOYAR0000007	RESISTOR	
R1442	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R1443	ERJ2GEJ473	M 47K OHM, 0.063W	
R1444	ERJ2GEJ473	M 47K OHM, 0.063W	
R1445	ERJ3GEYJ124	M 120KOHM, J, 1/16W	
R1446	ERJ3GEYJ124	M 120KOHM, J, 1/16W	
R1447	D0GB154JA057	RESISTOR	
R1448	D0GB154JA057	RESISTOR	
R1449	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R1450	ERJ3GEYJ331	M 330 OHM, J, 1/16W	
R1451	DOYAR0000007	RESISTOR	
R1452	DOYAR0000007	RESISTOR	
R1453	ERJ3EKF1002	M 10KOHM, 1/16W	LB80NTU, LB75NTU, LB80U, LB75U
R1454	ERJ2GEJ220	M 22 OHM, 0.063W	LB80NTU, LB75NTU, LB80U, LB75U
R1455	ERJ2GEJ102	M 1K OHM, 0.063W	
R1456	ERJ3GEYJ470	M 47 OHM, J, 1/16W	
R1457	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R1458	ERJ2GEJ100	M 10 OHM, 0.063W	
R1459	ERJ2GEJ121	M 120 OHM, 0.063W	
R1460	ERJ2GEJ100	M 10 OHM, 0.063W	
R1461	ERJ2GEJ121	M 120 OHM, 0.063W	
R1462	ERJ2GEJ101	M 100 OHM, 0.063W	
R1467	ERJ3GEY0R00	M 0 OHM, J, 1/16W	LB80U/E/EA, LB75U/E/EA
R1474	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R1475	ERJ8ENF1500	M 150 OHM, F, 1/8W	
R1476	ERJ8ENF1500	M 150 OHM, F, 1/8W	
R1477	ERJ8ENF1500	M 150 OHM, F, 1/8W	
R1478	ERJ8ENF1500	M 150 OHM, F, 1/8W	
R1479	ERJ8ENF1500	M 150 OHM, F, 1/8W	
R1480	ERJ8ENF1500	M 150 OHM, F, 1/8W	
R1481	ERJ6GEYG221	M 220 OHM, J, 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R1482	ERJ6GEYG221	M 220 OHM,J,1/10W	
R1483	ERJ6GEYG221	M 220 OHM,J,1/10W	
R1484	ERJ6GEYG221	M 220 OHM,J,1/10W	
R1485	ERJ3EKF2200	M 220 OHM, 1/16W	
R1486	ERJ3EKF8200	M 820 OHM, 0.063W	
R1487	D1BZ2700A012	RESISTOR	
R1488	ERJ3EKF8201	M 8.2KOHM, 0.063W	
R1489	ERJ3EKF8201	M 8.2KOHM, 0.063W	
R1490	ERJ3EKF2701	M 2.7KOHM, 1/16W	
R1491	ERJ3EKF2701	M 2.7KOHM, 1/16W	
R1492	ERJ3EKF4703	M 470KOHM, 0.063W	
R1493	ERJ3EKF5102	M 5.1KOHM, 0.063W	
R1494	ERJ2GEJ473	M 47K OHM, 0.063W	
R1495	ERJ2GEJ223	M 22KOHM, 0.063W	
R1498	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R1499	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R1500	ERJ3GEYJ153	M 15KOHM,J,1/16W	
R1501	ERJ3GEYJ153	M 15KOHM,J,1/16W	
R1502	ERJ3GEYJ560	M 56 OHM,J,1/16W	
R1503	ERJ3GEYJ560	M 56 OHM,J,1/16W	
R1504	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R1505	ERJ3GEYJ124	M 120KOHM,J,1/16W	
R1506	D0GB154JA057	RESISTOR	
R1507	ERJ2GEJ473	M 47K OHM, 0.063W	
R1508	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R1509	ERJ3GEYJ124	M 120KOHM,J,1/16W	
R1510	D0GB154JA057	RESISTOR	
R1511	ERJ2GEJ473	M 47K OHM, 0.063W	
R1513	ERJ2GEJ473	M 47K OHM, 0.063W	
R1600	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R1601	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R1602	ERJ3GEYJ560	M 56 OHM,J,1/16W	
R1603	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R1604	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R1605	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R1606	ERJ3GEYJ560	M 56 OHM,J,1/16W	
R1607	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R1608	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R1609	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R1610	ERJ3GEYJ560	M 56 OHM,J,1/16W	
R1611	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R1801	ERJ3GEYJ101	M 100 OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1802	EXB28V220J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1803	EXB28V560J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1804	EXB28V560J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1805	EXB28V560J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1806	EXB28V560J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1807	EXB28V560J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1808	EXB28V560J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1809	EXB28V560J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1810	EXB28V560J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1811	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1812	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1813	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1814	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1815	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1817	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1818	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA

Ref. No.	Part No.	Part Name & Description	Remarks
R1819	ERJ3GEYJ680	M 68 OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1820	ERJ3GEYJ680	M 68 OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1821	ERJ3GEYJ680	M 68 OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1822	ERJ3GEYJ680	M 68 OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1824	D0YAR0000007	RESISTOR	LB80NTU/E/EA, LB75NTU/E/EA
R1825	ERJ3GEYJ680	M 68 OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1826	ERJ3GEYJ680	M 68 OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1827	ERJ3GEYJ101	M 100 OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1828	ERJ3GEYJ101	M 100 OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1829	F1H1H2200008	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
R1830	ERJ3GEYJ220	M 22 OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1831	ERJ3GEYJ220	M 22 OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1833	ERJ3GEYJ220	M 22 OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1836	ERJ3GEYJ680	M 68 OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1837	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1838	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1839	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1840	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1841	EXB2HV100JV	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1842	EXB2HV100JV	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1843	EXB2HV100JV	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1844	EXB2HV100JV	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1845	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1846	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1847	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1848	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1849	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1850	ERJ3GEYJ102	M 1K OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1851	D0YAR0000007	RESISTOR	LB80NTU/E/EA, LB75NTU/E/EA
R1852	D0YAR0000007	RESISTOR	LB80NTU/E/EA, LB75NTU/E/EA
R1853	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1854	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1855	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1856	EXB28V100J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1858	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1859	ERJ3GEYJ102	M 1K OHM,J,1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1861	J0JBC0000098	FILTER	LB80NTU/E/EA, LB75NTU/E/EA
R1864	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1865	D0YAR0000007	RESISTOR	LB80NTU/E/EA, LB75NTU/E/EA
R1866	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA



Ref. No.	Part No.	Part Name & Description	Remarks
R1867	EXB2HV220JV	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1868	EXB2HV220JV	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1870	ERJ3GEYJ102	M 1K OHM, J, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1876	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1877	D0YAR0000007	RESISTOR	LB80NTU/E/EA, LB75NTU/E/EA
R1878	D0YAR0000007	RESISTOR	LB80NTU/E/EA, LB75NTU/E/EA
R1879	ERJ2GEJ220	M 22 OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1880	ERJ2GEJ220	M 22 OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1882	D0YAR0000007	RESISTOR	LB80NTU/E/EA, LB75NTU/E/EA
R1883	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1884	D0YAR0000007	RESISTOR	LB80NTU/E/EA, LB75NTU/E/EA
R1885	ERJ3GEYJ221	M 220 OHM, J, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1888	ERJ1TYJ1R0U	M 1.0 OHM, 1W	LB80NTU/E/EA, LB75NTU/E/EA
R1889	ERJ3EKF2740	M 274 OHM, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1890	ERJ3EKF1001	M 1K OHM, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1891	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1892	EXB28V220J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1893	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1894	D0YAR0000007	RESISTOR	LB80NTU/E/EA, LB75NTU/E/EA
R1895	EXB28V103J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1896	ERJ2GEJ103	M 10K OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1897	D0YAR0000007	RESISTOR	LB80NTU/E/EA, LB75NTU/E/EA
R1898	EXB2HV220JV	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1899	EXB28V104J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1900	EXB28V472J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1902	EXB28V220J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1903	EXB28V103J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1904	EXB28V103J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1908	ERJ2GEJ680	M 68 OHM, 0.063W	LB80NTU/E/EA, LB75NTU/E/EA
R1909	ERJ3GEYJ220	M 22 OHM, J, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1910	ERJ3GEYJ473	M 47KOHM, J, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1911	ERJ3GEYJ220	M 22 OHM, J, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1912	ERJ3GEYJ473	M 47KOHM, J, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1913	ERJ3GEYJ220	M 22 OHM, J, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1914	ERJ3GEYJ220	M 22 OHM, J, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1915	EXB28V220J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1916	EXB28V220J	RESISTOR ARRAY	LB80NTU/E/EA, LB75NTU/E/EA
R1917	ERJ3GEYJ102	M 1K OHM, J, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1924	ERJ3GEYJ102	M 1K OHM, J, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1925	ERJ3GEY0R00	M 0 OHM, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA

Ref. No.	Part No.	Part Name & Description	Remarks
R1927	ERJ3GEY0R00	M 0 OHM, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1928	ERJ3GEY0R00	M 0 OHM, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1929	ERJ3GEY0R00	M 0 OHM, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1930	ERJ3GEY0R00	M 0 OHM, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1931	ERJ3GEY0R00	M 0 OHM, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1933	ERJ3GEY0R00	M 0 OHM, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1934	ERJ3GEY0R00	M 0 OHM, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1935	ERJ3GEY0R00	M 0 OHM, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1936	ERJ3GEY0R00	M 0 OHM, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1937	ERJ3GEYJ560	M 56 OHM, J, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R1938	ERJ3GEY0R00	M 0 OHM, 1/16W	LB80NTU/E/EA, LB75NTU/E/EA
R5001	ERJ3EKF2701	M 2.7KOHM, 1/16W	
R5002	ERJ3EKF2701	M 2.7KOHM, 1/16W	
R5003	ERJ3EKF2701	M 2.7KOHM, 1/16W	
R5004	ERJ3EKF2701	M 2.7KOHM, 1/16W	
R9101	ERDS1TJ474	C 4.7KOHM, J, 1/2W	△
R9601	ERX2SJR47E	M 0.47OHM, J, 2W (B-PCB)	
R9630	ERJ14YJ3R3U	M 3.3 OHM, J, 1/4W (B-PCB)	
R9631	ERJ8GEYJ220	M 22 OHM, J, 1/4W (B-PCB)	
R9632	ERJ14YJ5R6U	M 5.6 OHM, J, 1/4W (B-PCB)	
R9633	ERJ8GEYJ100	M 10 OHM, J, 1/4W (B-PCB)	
R9634	ERJ8GEYJ120	M 12 OHM, J, 1/4W (B-PCB)	
R9636	ERJ14YJ3R3U	M 3.3 OHM, J, 1/4W (B-PCB)	
R9638	ERJ14YJ5R6U	M 5.6 OHM, J, 1/4W (B-PCB)	
R9639	ERJ8GEYJ100	M 10 OHM, J, 1/4W (B-PCB)	
R9640	ERJ8GEYJ120	M 12 OHM, J, 1/4W (B-PCB)	
R9653	D0XGR22J0004	RESISTOR (B-PCB)	
[CAPACITORS]			
C1001	F1H1E105A126	CAPACITOR	
C1002	F1H1E104A029	CAPACITOR	
C1003	F1H1E104A029	CAPACITOR	
C1004	F1H1E104A029	CAPACITOR	
C1005	F1H1E104A029	CAPACITOR	
C1006	F1H1E104A029	CAPACITOR	
C1007	F1H1E104A029	CAPACITOR	
C1008	F1H1E105A126	CAPACITOR	
C1009	F1H1E104A029	CAPACITOR	
C1010	F1H1E104A029	CAPACITOR	
C1011	F1H1E104A029	CAPACITOR	
C1012	F1H1E104A029	CAPACITOR	
C1013	F1H1E104A029	CAPACITOR	
C1014	F1H1E104A029	CAPACITOR	
C1015	F1H1E105A126	CAPACITOR	
C1016	F1G1C104A077	CAPACITOR	
C1017	EEEFK1E101P	CAPACITOR	
C1018	F1G1H1020008	CAPACITOR	
C1019	F1G1C104A077	CAPACITOR	
C1020	F1G1C104A077	CAPACITOR	
C1021	F1G1C104A077	CAPACITOR	
C1022	F1G1C104A077	CAPACITOR	
C1023	F1G1C104A077	CAPACITOR	
C1024	F1G1C104A077	CAPACITOR	
C1025	F1H1E104A029	CAPACITOR	
C1026	F1H1E104A029	CAPACITOR	

Ref. No.	Part No.	Part Name & Description	Remarks
C1027	F1H1E104A029	CAPACITOR	
C1028	F1H1E104A029	CAPACITOR	
C1029	F1H1E104A029	CAPACITOR	
C1030	F1H1E104A029	CAPACITOR	
C1031	F1H1E104A029	CAPACITOR	
C1032	F1G1C104A077	CAPACITOR	
C1033	F1H1E104A029	CAPACITOR	
C1034	F1G1C104A077	CAPACITOR	
C1035	F1H1E104A029	CAPACITOR	
C1036	F1G1H1020008	CAPACITOR	
C1037	F1G1C104A077	CAPACITOR	
C1038	F1G1H1020008	CAPACITOR	
C1039	F1G1H1020008	CAPACITOR	
C1040	F1G1C104A077	CAPACITOR	
C1041	F1G1C104A077	CAPACITOR	
C1042	F1G1C104A077	CAPACITOR	
C1043	F1H1E104A029	CAPACITOR	
C1044	F1H1E104A029	CAPACITOR	
C1045	F1H1E104A029	CAPACITOR	
C1046	F1J0J106A013	CAPACITOR	
C1047	F2G1E3300010	CAPACITOR	
C1048	F2G1E3300010	CAPACITOR	
C1049	F2G1E3300010	CAPACITOR	
C1050	F1H1E104A029	CAPACITOR	
C1051	F1G1C104A077	CAPACITOR	
C1052	F1H1E104A029	CAPACITOR	
C1053	F1G1C104A077	CAPACITOR	
C1054	F1H1E104A029	CAPACITOR	
C1055	F1G1C104A077	CAPACITOR	
C1056	F2G1E3300010	CAPACITOR	
C1057	F2G1E3300010	CAPACITOR	
C1058	F2G1E3300010	CAPACITOR	
C1059	F1H1E104A029	CAPACITOR	
C1060	F1H1E104A029	CAPACITOR	
C1061	F1H1E104A029	CAPACITOR	
C1062	F1H1E104A029	CAPACITOR	
C1063	F1H1E104A029	CAPACITOR	
C1064	F1H1E104A029	CAPACITOR	
C1065	F1G1C1030008	CAPACITOR	
C1066	F1G1C1030008	CAPACITOR	
C1067	F1G1C1030008	CAPACITOR	
C1068	F1G1C1030008	CAPACITOR	
C1069	F1G1C1030008	CAPACITOR	
C1070	F1G1C1030008	CAPACITOR	
C1071	F1G1C1030008	CAPACITOR	
C1072	F1G1C1030008	CAPACITOR	
C1073	F1G1C1030008	CAPACITOR	
C1074	F1G1C1030008	CAPACITOR	
C1075	F1G1C1030008	CAPACITOR	
C1076	F1G1C1030008	CAPACITOR	
C1077	F1G1C1030008	CAPACITOR	
C1078	F1G1C1030008	CAPACITOR	
C1079	F1G1C1030008	CAPACITOR	
C1080	F1G1C1030008	CAPACITOR	
C1081	F1J0J106A013	CAPACITOR	
C1082	F1H1E104A029	CAPACITOR	
C1083	F1G1C104A077	CAPACITOR	
C1084	F1G1C104A077	CAPACITOR	
C1085	F1G1C104A077	CAPACITOR	
C1086	F1H1E104A029	CAPACITOR	
C1087	F1G1C104A077	CAPACITOR	
C1088	F1G1C104A077	CAPACITOR	
C1089	F1G1C104A077	CAPACITOR	
C1090	F1G1C104A077	CAPACITOR	
C1091	F1G1C104A077	CAPACITOR	
C1093	F1H1H2200008	CAPACITOR	
C1094	F1H1H100A831	CAPACITOR	
C1095	F1G1H1020008	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1096	F1H1H2200008	CAPACITOR	
C1097	EEH0B0G101R	CAPACITOR	
C1098	F1G1C104A077	CAPACITOR	

Ref. No.	Part No.	Part Name & Description	Remarks
C1099	F1H1H1010005	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1100	F1H1H2200008	CAPACITOR	
C1101	F1G1H1020008	CAPACITOR	
C1102	F1H1H2200008	CAPACITOR	
C1103	F1H1H2200008	CAPACITOR	
C1104	F1H1H3300005	CAPACITOR	
C1105	F1H1H3300005	CAPACITOR	
C1106	F1H1H151A792	CAPACITOR	
C1107	F1H1H100A831	CAPACITOR	
C1108	F1H1H2200008	CAPACITOR	
C1109	F1H1H2200008	CAPACITOR	
C1110	F1H1H3300005	CAPACITOR	
C1111	F1H1H3300005	CAPACITOR	
C1112	F1G1C104A077	CAPACITOR	
C1113	F1H1H2200008	CAPACITOR	
C1115	F1H1H2200008	CAPACITOR	
C1116	F1G1C104A077	CAPACITOR	
C1117	F1H1H2200008	CAPACITOR	
C1118	F1H1H2200008	CAPACITOR	
C1119	F1H1H100A831	CAPACITOR	
C1120	F1H1H151A792	CAPACITOR	
C1121	F1H1H100A831	CAPACITOR	
C1122	EEH0B0J221UP	CAPACITOR	
C1123	F1H1H2200008	CAPACITOR	
C1124	F1G1C1030008	CAPACITOR	
C1125	F1H1H2200008	CAPACITOR	
C1126	EEH0B0J221UP	CAPACITOR	
C1127	F1H1H3300005	CAPACITOR	
C1128	F1G1C1030008	CAPACITOR	
C1129	F1H1H3300005	CAPACITOR	
C1130	EEH0B0J221UP	CAPACITOR	
C1131	F1H1H2200008	CAPACITOR	
C1132	F1G1C1030008	CAPACITOR	
C1133	F1H1H2200008	CAPACITOR	
C1134	F1G1C104A077	CAPACITOR	
C1135	F1H1H2200008	CAPACITOR	
C1136	F1H1H472A219	CAPACITOR	
C1137	F1H1H2200008	CAPACITOR	
C1138	F1H1A1050029	CAPACITOR	
C1139	F1H1H100A831	CAPACITOR	
C1140	F2G0J3300014	CAPACITOR	
C1141	F1H1H151A792	CAPACITOR	
C1142	F1G1C104A077	CAPACITOR	
C1143	F1H1H100A831	CAPACITOR	
C1144	F2G0J3300014	CAPACITOR	
C1145	F1H1H2200008	CAPACITOR	
C1146	F1G1C104A077	CAPACITOR	
C1147	F1G1C1030008	CAPACITOR	
C1148	F1G1C1030008	CAPACITOR	
C1149	F1G1H1020008	CAPACITOR	
C1150	F1G1C104A077	CAPACITOR	
C1151	F1G1C104A077	CAPACITOR	
C1152	F1G1H1020008	CAPACITOR	
C1153	F1H0J1050012	CAPACITOR	
C1154	F1G1H1020008	CAPACITOR	
C1155	F2G0J3300014	CAPACITOR	
C1156	F1G1C1030008	CAPACITOR	
C1157	F2G0J3300016	CAPACITOR	
C1158	F1G1C1030008	CAPACITOR	
C1159	F2G0J3300014	CAPACITOR	
C1160	F1G1C1030008	CAPACITOR	
C1161	F1H1A2250001	CAPACITOR	
C1162	F1G1H1020008	CAPACITOR	
C1163	F1H1A2250001	CAPACITOR	
C1164	F1H1E104A029	CAPACITOR	
C1165	F1G1C104A077	CAPACITOR	
C1166	F1J1E105A197	CAPACITOR	
C1167	F1G1C104A077	CAPACITOR	
C1168	F1G1C104A077	CAPACITOR	
C1169	ECJ2FF1A106Z	C 10UF, 10V	
C1170	ECJ2FF1A106Z	C 10UF, 10V	

Ref. No.	Part No.	Part Name & Description	Remarks
C1171	F1G1C104A077	CAPACITOR	
C1172	F1G1C104A077	CAPACITOR	
C1173	F1G1C1030008	CAPACITOR	
C1174	ECJ2FF1A106Z	C 10UF, 10V	
C1175	ECJ2FF1A106Z	C 10UF, 10V	
C1176	F1G1C104A077	CAPACITOR	
C1177	F1G1C104A077	CAPACITOR	
C1178	ECJ2FF1A106Z	C 10UF, 10V	
C1179	F1G1C104A077	CAPACITOR	
C1180	F1G1C1030008	CAPACITOR	
C1181	F1G1C104A077	CAPACITOR	
C1182	F1G1C104A077	CAPACITOR	
C1183	F1G1C104A077	CAPACITOR	
C1184	F1G1C104A077	CAPACITOR	
C1185	F1G1C104A077	CAPACITOR	
C1186	F1G1C104A077	CAPACITOR	
C1187	F1G1H1020008	CAPACITOR	
C1188	ECJ2FF1A106Z	C 10UF, 10V	
C1189	F1G1C104A077	CAPACITOR	
C1190	F1G1C104A077	CAPACITOR	
C1191	F1G1C104A077	CAPACITOR	
C1192	F1G1C104A077	CAPACITOR	
C1193	ECJ1VC1H100C	C 10PF, 50V	
C1195	F1G1C104A077	CAPACITOR	
C1196	F1H1A2250001	CAPACITOR	
C1197	F1G1C104A077	CAPACITOR	
C1198	F1G1C104A077	CAPACITOR	
C1199	ECJ2FF1A106Z	C 10UF, 10V	
C1200	F1H0J475A010	CAPACITOR	
C1201	F1G1H1020008	CAPACITOR	
C1202	F1G1C104A077	CAPACITOR	
C1203	F1H1C104A008	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1204	F1G1C104A077	CAPACITOR	
C1205	F1H1C8230002	CAPACITOR	
C1206	F1G1C1030008	CAPACITOR	
C1207	F1H1C105A008	CAPACITOR	
C1208	F1G1C104A077	CAPACITOR	
C1209	F1G1C1030008	CAPACITOR	
C1210	F1G1C104A077	CAPACITOR	
C1211	F1H1H1800004	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1212	F1H1H104A220	CAPACITOR	
C1213	F1G1C1030008	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1214	F1G1H1020008	CAPACITOR	
C1215	F2G0J3300014	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1217	F1H1H1800004	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1218	F2G1C4700014	CAPACITOR	
C1219	F1G1C104A077	CAPACITOR	
C1220	F2G1C4700014	CAPACITOR	
C1221	F1G1C104A077	CAPACITOR	
C1222	F1G1C104A077	CAPACITOR	
C1223	ECJ2FF1A106Z	C 10UF, 10V	LB80NTU, LB75NTU, LB80U, LB75U
C1224	EEFCD0D101R	CAPACITOR	
C1225	F2G0J3300014	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1226	F1G1C104A077	CAPACITOR	
C1227	F1G1H1020008	CAPACITOR	
C1228	F1H1E105A126	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1229	F1G1C104A077	CAPACITOR	
C1230	F1G1H1020008	CAPACITOR	

Ref. No.	Part No.	Part Name & Description	Remarks
C1231	F1H1H222A219	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1233	F1G1C104A077	CAPACITOR	
C1234	F1H1A2250001	CAPACITOR	
C1235	F2G1C4700014	CAPACITOR	
C1236	F1H1H5610007	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1237	F1G1C104A077	CAPACITOR	
C1238	F1G1C104A077	CAPACITOR	
C1239	F1G1C104A077	CAPACITOR	
C1240	F2G0J1010013	CAPACITOR	
C1241	F1G1C104A077	CAPACITOR	
C1242	F1G1C104A077	CAPACITOR	
C1243	F1G1C104A077	CAPACITOR	
C1244	F1H1A2250001	CAPACITOR	
C1245	F1G1C104A077	CAPACITOR	
C1246	F1H1A2250001	CAPACITOR	
C1247	ECJ1VC1H100C	C 10PF, 50V	
C1248	F1H0J1050012	CAPACITOR	
C1249	F2G1C4700014	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1250	F1G1C104A077	CAPACITOR	
C1251	ECJ2FF1A106Z	C 10UF, 10V	
C1252	F1H1A1050029	CAPACITOR	
C1253	F1H1E104A029	CAPACITOR	
C1255	F1H1E104A029	CAPACITOR	
C1256	ECJ2FF1A106Z	C 10UF, 10V	LB80NTU, LB75NTU, LB80U, LB75U
C1258	F1J0J106A013	CAPACITOR	
C1259	F1J0J106A013	CAPACITOR	
C1261	F1H1E104A029	CAPACITOR	
C1263	EEEFK1E101P	CAPACITOR	
C1264	F1H1C104A008	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1265	F1G1C104A077	CAPACITOR	
C1266	F1H1C104A008	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1267	F1H1A1050029	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1268	ECJ2FF1A106Z	C 10UF, 10V	LB80NTU, LB75NTU, LB80U, LB75U
C1269	F1H1C333A041	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1270	F1G1C1030008	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1271	F1G1C104A077	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1272	F1H1C104A008	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1274	F1H1H331A792	CAPACITOR	
C1275	F1H1A2250001	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1276	F1H1C104A008	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1277	F1G1C104A077	CAPACITOR	
C1279	F1G1C104A077	CAPACITOR	
C1281	F1G1C104A077	CAPACITOR	
C1284	F1G1C104A077	CAPACITOR	
C1285	F2H0J820A008	CAPACITOR	
C1286	F1G1C104A077	CAPACITOR	
C1287	F1G1C104A077	CAPACITOR	
C1288	F1J0J1060004	CAPACITOR	
C1290	F1G1C104A077	CAPACITOR	
C1291	F1G1C104A077	CAPACITOR	

Ref. No.	Part No.	Part Name & Description	Remarks
C1292	F1G1C104A077	CAPACITOR	
C1293	F1H1H221A792	CAPACITOR	
C1295	F1H1H102A219	CAPACITOR	
C1297	F1H1H1500009	CAPACITOR	
C1298	F1H1H1500009	CAPACITOR	
C1299	F1G1C104A077	CAPACITOR	
C1300	F1G1C104A077	CAPACITOR	
C1302	F1J1E105A197	CAPACITOR	
C1304	F2G0J4700010	CAPACITOR	
C1305	F2G0J4700010	CAPACITOR	
C1306	F2G1A221A030	CAPACITOR	
C1307	F2G0J3300014	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1308	F1H1E104A029	CAPACITOR	
C1309	F1G1C104A077	CAPACITOR	
C1310	F1G1C104A077	CAPACITOR	
C1311	F1G1C104A077	CAPACITOR	
C1312	F1G1C104A077	CAPACITOR	
C1313	F1G1C104A077	CAPACITOR	
C1314	F1G1C104A077	CAPACITOR	
C1315	F1G1C104A077	CAPACITOR	
C1316	F1G1C104A077	CAPACITOR	
C1317	F1G1C104A077	CAPACITOR	
C1318	F1G1C104A077	CAPACITOR	
C1319	F1G1C104A077	CAPACITOR	
C1320	F1G1C104A077	CAPACITOR	
C1321	F1G1C104A077	CAPACITOR	
C1322	F1G1C104A077	CAPACITOR	
C1323	F1G1C104A077	CAPACITOR	
C1324	F1G1C104A077	CAPACITOR	
C1325	F1G1C104A077	CAPACITOR	
C1326	F1G1C104A077	CAPACITOR	
C1327	F1G1C104A077	CAPACITOR	
C1328	F1G1C104A077	CAPACITOR	
C1329	F1G1C104A077	CAPACITOR	
C1330	F1G1C104A077	CAPACITOR	
C1331	F1G1C104A077	CAPACITOR	
C1332	F1G1C104A077	CAPACITOR	
C1333	F1G1C104A077	CAPACITOR	
C1334	F1G1C104A077	CAPACITOR	
C1335	F1G1C104A077	CAPACITOR	
C1336	F1G1C104A077	CAPACITOR	
C1337	F1G1C104A077	CAPACITOR	
C1338	F1G1C104A077	CAPACITOR	
C1339	F1G1C104A077	CAPACITOR	
C1340	F1G1C104A077	CAPACITOR	
C1341	F1G1C104A077	CAPACITOR	
C1342	F1G1C104A077	CAPACITOR	
C1343	F1G1C104A077	CAPACITOR	
C1344	F1G1C104A077	CAPACITOR	
C1345	F1G1C104A077	CAPACITOR	
C1346	F1G1C104A077	CAPACITOR	
C1347	F1G1C104A077	CAPACITOR	
C1348	F1G1C104A077	CAPACITOR	
C1349	F1G1C104A077	CAPACITOR	
C1350	F1H1A1050029	CAPACITOR	
C1352	F1G1C104A077	CAPACITOR	
C1353	ECJ2FF1A106Z	C 10UF, 10V	
C1356	F1G1C104A077	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1357	F1H1E104A029	CAPACITOR	
C1358	F1H1E104A029	CAPACITOR	
C1359	F1G1C104A077	CAPACITOR	
C1360	F1H1A2250001	CAPACITOR	
C1361	F1G1H1020008	CAPACITOR	
C1362	F1G1C104A077	CAPACITOR	
C1363	F1G1C104A077	CAPACITOR	
C1364	F1H1E104A029	CAPACITOR	
C1365	F1H1E104A029	CAPACITOR	
C1366	F1H1E104A029	CAPACITOR	
C1367	F1H1E104A029	CAPACITOR	
C1368	F1H1E104A029	CAPACITOR	

Ref. No.	Part No.	Part Name & Description	Remarks
C1369	F1H1E104A029	CAPACITOR	
C1370	F1H1E104A029	CAPACITOR	
C1371	F1H1E104A029	CAPACITOR	
C1372	F1H1E104A029	CAPACITOR	
C1373	F1G1C104A077	CAPACITOR	
C1374	F1G1C104A077	CAPACITOR	
C1375	F1G1C104A077	CAPACITOR	
C1376	F1G1C104A077	CAPACITOR	
C1377	F1G1C104A077	CAPACITOR	
C1379	F1G1C104A077	CAPACITOR	
C1380	F1G1C104A077	CAPACITOR	
C1381	F1G1C104A077	CAPACITOR	
C1382	F1G1C104A077	CAPACITOR	
C1383	F1G1C104A077	CAPACITOR	
C1384	F1G1C104A077	CAPACITOR	
C1385	F1G1C104A077	CAPACITOR	
C1386	F1G1C104A077	CAPACITOR	
C1387	F1G1C104A077	CAPACITOR	
C1388	F1G1C104A077	CAPACITOR	
C1389	F1G1C104A077	CAPACITOR	
C1390	F2G1C1010040	CAPACITOR	LB80NTU, LB75NTU, LB80U, LB75U
C1393	F1G1C104A077	CAPACITOR	
C1394	F2G1C1010040	CAPACITOR	
C1395	F1G1C104A077	CAPACITOR	
C1396	F1G1C104A077	CAPACITOR	
C1397	ECJ2FF1A106Z	C 10UF, 10V	
C1398	ECJ2FF1A106Z	C 10UF, 10V	
C1399	F1H1A1050029	CAPACITOR	
C1400	ECJ2FF1A106Z	C 10UF, 10V	
C1401	F1H1A1050029	CAPACITOR	
C1402	F1H1A2250001	CAPACITOR	
C1403	ECJ2FF1A106Z	C 10UF, 10V	
C1404	F1H1A1050029	CAPACITOR	
C1405	F1G1C104A077	CAPACITOR	
C1406	F1G1C104A077	CAPACITOR	
C1407	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C1408	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C1409	F1H1E104A029	CAPACITOR	
C1410	F1G1C104A077	CAPACITOR	
C1411	F2G0J4700010	CAPACITOR	
C1412	F1J1E105A197	CAPACITOR	
C1413	F1G1C104A077	CAPACITOR	
C1414	F1G1C104A077	CAPACITOR	
C1415	F1G1C104A077	CAPACITOR	
C1416	F1G1C104A077	CAPACITOR	
C1417	F1G1C104A077	CAPACITOR	
C1418	F1G1C104A077	CAPACITOR	
C1434	EEEFK1E101P	CAPACITOR	
C1435	ECJ1VF1E104Z	C 0.1UF, Z, 25V	
C1436	F1J1E105A197	CAPACITOR	
C1437	ECJ0EB1H102K	C 1000PF, 50V	
C1438	ECJ0EB1H102K	C 1000PF, 50V	
C1439	F1J1E105A197	CAPACITOR	
C1440	ECJ0EF1C104Z	C 0.1UF, 16V	
C1441	F1G1C104A077	CAPACITOR	
C1442	F1K1E4750002	CAPACITOR	
C1443	F1K1C106A116	CAPACITOR	
C1444	F1K1C106A116	CAPACITOR	
C1445	F1H1E104A029	CAPACITOR	
C1446	F1H1H103A219	CAPACITOR	
C1447	F1G1H222A571	CAPACITOR	
C1448	F1G1H220A565	CAPACITOR	
C1449	F1K1E4750002	CAPACITOR	
C1450	F1K1C106A116	CAPACITOR	
C1451	F1K1C106A116	CAPACITOR	
C1452	F1H1E104A029	CAPACITOR	
C1453	F1G1H220A565	CAPACITOR	
C1454	F1G1H222A571	CAPACITOR	
C1455	F1H1H103A219	CAPACITOR	
C1500	F1H1C105A008	CAPACITOR	
C1501	F1H1H472A219	CAPACITOR	

Ref. No.	Part No.	Part Name & Description	Remarks
C1502	F1H1C105A008	CAPACITOR	
C1503	F1H1H472A219	CAPACITOR	
C1504	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C1505	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C1506	ECJ1VC1H151J	CAPACITOR	
C1600	ECJ1VB1H103K	C 0.01UF, K, 50V	
C1601	F2G0J3300014	CAPACITOR	
C1602	ECJ1VB1H103K	C 0.01UF, K, 50V	
C1603	F2G0J3300014	CAPACITOR	
C1604	ECJ1VB1H103K	C 0.01UF, K, 50V	
C1605	F2G0J3300014	CAPACITOR	
C1801	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1802	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1803	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1806	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1807	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1808	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1809	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1810	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1811	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1812	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1813	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1814	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1815	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1816	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1817	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1818	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1819	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1820	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1821	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1822	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1823	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1824	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1825	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1826	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1827	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1828	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1829	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1830	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1831	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1832	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1833	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1834	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1835	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1836	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA

Ref. No.	Part No.	Part Name & Description	Remarks
C1837	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1838	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1839	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1840	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1841	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1842	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1843	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1844	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1845	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1846	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1847	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1848	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1849	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1850	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1851	ECJ1VB1H472K	C 4700PF, K, 50V	LB80NTU/E/EA, LB75NTU/E/EA
C1852	EEFCX0G151R	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1853	EEFCD0D101R	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1854	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1855	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1856	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1857	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1858	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1859	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1860	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1861	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1862	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1863	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1864	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1865	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1866	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1867	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1868	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1869	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1870	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1871	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1872	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1873	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1874	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1875	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1876	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA

Ref. No.	Part No.	Part Name & Description	Remarks
C1877	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1878	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1879	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1880	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1881	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1883	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1884	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1885	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1887	F1G1H101A565	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1888	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1889	F1G0J4740003	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1890	F1J0J2260002	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1893	F1J0J2260002	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1894	F1J0J106A013	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1895	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1896	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1897	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1898	F1G1C104A077	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1902	F1H1H2200008	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1903	ECJ1VC1H100D	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C1904	ECJ1VC1H050C	CAPACITOR	LB80NTU/E/EA, LB75NTU/E/EA
C5001	F4D272750005	CAPACITOR	
C5002	F4D272750005	CAPACITOR	
C5003	F4D272750005	CAPACITOR	
C5004	F4D272750005	CAPACITOR	
C9101	ECQU2A105MLA	CAPACITOR	△
C9102	F1BAH1520010	CAPACITOR	△
C9103	F1BAH1520010	CAPACITOR	△
C9104	ECQU2A334MLA	CAPACITOR	△
C9603	F0CZZ4740003	CAPACITOR (B-PCB)	
C9610	F0C2E1050008	CAPACITOR (B-PCB)	
C9617	F0C3E1820001	CAPACITOR (B-PCB)	
C9618	F0C3E1820001	CAPACITOR (B-PCB)	
[OTHERS]			
A1	K1MY36BA0006	CONNECTOR	
A2	K1MY36BA0006	CONNECTOR	
A3	K1MY36BA0006	CONNECTOR	
A4	K1KA07A00292	CONNECTOR	
A5	K1KA04A00667	CONNECTOR	
A6	K1KA05AA0150	CONNECTOR	
A7	K1KA04AA0150	CONNECTOR	
A8	K1MN22AA0041	CONNECTOR	
A9	K1KA03AA0150	CONNECTOR	
A10	K1KA02AA0104	CONNECTOR	
A11	K1KA02A00787	CONNECTOR	
A12	K1KA02A00787	CONNECTOR	
A13	K1KB50A00151	CONNECTOR	
A14	K1KA02A00787	CONNECTOR	
A15	K1KA03A00632	CONNECTOR	
A16	K1KA03AA0104	CONNECTOR	
A17	K1KA03A00632	CONNECTOR	
A18	K1KA03A00632	CONNECTOR	
A19	K1KA03A00632	CONNECTOR	
CF2001	D4CC1103A037	THERMISTOR	

Ref. No.	Part No.	Part Name & Description	Remarks
CF2001 02	D4CC1103A037	THERMISTOR	
CF2002	D4CEY2R20002	THERMISTOR	
CF2002S	K9ZZ000001719	LUG TERMINAL	
F9101-1	K3GE1ZA00010	FUSE HOLDER	
F9101-2	K3GE1ZA00010	FUSE HOLDER	
F9101	K5D632BNA005	FUSE	△
JK1001	K1CB205B0007	S-VIDEO/VIDEO IN	
JK1003	K2HA2YYB0001	AUDIO IN	
JK1004	K1FB224B0002	RGB IN1/RS232C I/F	
JK1005	K1FB115B0124	RGB IN2/OUT	
JK1006	K2HC206B0004	COMPUTER1/AUDIO OUT	
JK9101	K2AZYB000001	INLET	△
JS1003	ERJ6GEY0R00	M 0 OHM, J, 1/10W	
JS1004	ERJ6GEY0R00	M 0 OHM, J, 1/10W	
JS1005	ERJ6GEY0R00	M 0 OHM, J, 1/10W	
LF9101	G0B123J00003	LINE FILTER	△
M1	K1KA02B00294	CONNECTOR	
M2	K1KA02B00294	CONNECTOR	
RM1000	B3RAD0000126	DIODE	
WL1	K1NA09E00050	CONNECTOR	LB80NTU/E/EA, LB75NTU/E/EA
WL2	K1KA50A00224	CONNECTOR	LB80NTU/E/EA, LB75NTU/E/EA
WL3	K1KA10BA0014	CONNECTOR	LB80NTU/E/EA, LB75NTU/E/EA
X1001	H0J172500002	CRYSTAL	
X1002	H0J270500116	CRYSTAL	
X1005	H0J327200115	CRYSTAL	LB80NTU, LB75NTU, LB80U, LB75U
X1801	H1A6605B0008	CRYSTAL	LB80NTU/E/EA, LB75NTU/E/EA
X1802	H1A1225B0015	CRYSTAL	LB80NTU/E/EA, LB75NTU/E/EA
ZA1001	K4CD01000013	LUG TERMINAL	
ZA1002	K4CD01000013	LUG TERMINAL	
ZA1003	K4CD01000013	LUG TERMINAL	
ZA1004	K4CD01000013	LUG TERMINAL	
ZA1005	K4CD01000013	LUG TERMINAL	
ZA1801	K4CD01000013	LUG TERMINAL	LB80NTU/E/EA, LB75NTU/E/EA
ZA1802	K4CD01000013	LUG TERMINAL	LB80NTU/E/EA, LB75NTU/E/EA
ZA9101	K9ZZ00000424	LUG TERMINAL	
RTL	TNPA4537	CIRCUIT BOARD (WL)	△ LB80NTU/E/EA, LB75NTU/E/EA
	TNPA4541	CIRCUIT BOARD (Z)	△
	TNPA4550	CIRCUIT BOARD (M1)	△
	TNPA4593	CIRCUIT BOARD (M2)	△
RTL	TXANP01QPRZ	CIRCUIT BOARD (A)	△ LB80NTU, LB75NTU
	TXANP01VKG7	CIRCUIT BOARD (A)	△ LB80NTE/EA, LB75NTE/EA
	TXANP01QQAZ	CIRCUIT BOARD (A)	△ LB80U, LB75U
	TXANP01VKH9	CIRCUIT BOARD (A)	△ LB80E/EA, LB75E/EA
	TXANP02VKG7	CIRCUIT BOARD (K)	△
	TXANP99VKG7	CIRCUIT BOARD (S)	△
	ETX1MM708MC	CIRCUIT BOARD (P)	△
	TXANP04VKG7	BALLAST UNIT ASSY	△

## **Control Command**

**PT-LB80NT\*\***

**PT-LB75NT\*\***

**PT-LB80\*\***

**PT-LB75\*\***

## Using the Serial Terminal

### 1. Basic Format

Transmission from the computer begins with STX, then the command, parameter and ETX are sent in this order. Add parameters according to the details of control.

Basic control command (without parameter)

Start (STX)	Command	Command End (ETX)
1 byte	3 bytes	1 byte

Basic control command (with parameters)

Start (STX)	Command	Separator (colon)	Parameters	Command End (ETX)
1 byte	3 bytes	1 byte	Undefined length	Undefined length

Response (Callback) of the basic control command

In the period when the command can be accepted

Differs according to each command.

In the period when commands cannot be accepted or the command does not exist

Hexadecimal	02h	45h	52h	34h	30h	31h	03h
Character		E	R	4	0	1	

In case of the parameter error

Hexadecimal	02h	45h	52h	34h	30h	32h	03h
Character		E	R	4	0	2	

Notes:

- When sending several commands, be sure to wait for a response from the projector, and send the next command after 0.5 seconds or more pass.
- It might take time by the time the response returns because the command is processed in the projector. Set the time-out to 10 seconds or longer.



## 2. Basic Control Command

### Explanatory notes

○: Yes (Enable)

×: No (Disable)

△: Case by case (Refer to the note.)

### 2.1. Power ON (Lamp ON) key

Hexadecimal	02h	50h	4Fh	4Eh	03h
Character		P	O	N	

Response (Callback)

In the period when the command can be accepted (This command in power-on condition is included)

Hexadecimal	02h	50h	4Fh	4Eh	03h
Character		P	O	N	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	○	○	○

Note:

- When you confirm whether to have succeeded in power-on, confirm it by QPW (Query Power) command after receiving the callback of PON command.

### 2.2. Power OFF (Standby) key

Hexadecimal	02h	50h	4Fh	46h	03h
Character		P	O	F	

Response (Callback)

In the period when the command can be accepted (This command in power-off condition is included)

Hexadecimal	02h	50h	4Fh	46h	03h
Character		P	O	F	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	○	○	○

Note:

- When you confirm whether to have succeeded in power-off, confirm it by QPW (Query Power) command after receiving the callback of POF command.

### 2.3. AUTO SETUP key

Hexadecimal	02h	4Fh	41h	53h	03h
Character		O	A	S	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	41h	53h	03h
Character		O	A	S	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	△	×

Note:

- During NO SIGNAL, this command is available only when "Signal Search" is "ON".

### 2.4. AV MUTE key

Hexadecimal	02h	4Fh	53h	48h	3Ah	*1	03h
Character		O	S	H	:	*2	

Parameters (\*1, \*2)

	AV MUTE OFF	AV MUTE ON
Hexadecimal	30h	31h
Character	0	1

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	53h	48h	3Ah	*1	03h
Character		O	S	H	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	○	○

## 2.5. FREEZE key

Hexadecimal	02h	4Fh	46h	5Ah	3Ah	*1	03h
Character		O	F	Z	:	*2	

Parameters (\*1, \*2)

	FREEZE OFF	FREEZE ON
Hexadecimal	30h	31h
Character	0	1

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	46h	5Ah	3Ah	*1	03h
Character		O	F	Z	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

## 2.6. INPUT SELECT key

Hexadecimal	02h	49h	49h	53h	3Ah	*1	*3	*5	03h
Character		I	I	S	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	COMPUTER1			COMPUTER2		
Hexadecimal	52h	47h	31h	52h	47h	32h
Character	R	G	I	R	G	2
	VIDEO			S-VIDEO		
Hexadecimal	56h	49h	44h	53h	56h	44h
Character	V	I	D	S	V	D
	NETWORK					
Hexadecimal	4Eh	57h	50h			
Character	N	W	P			

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	49h	49h	53h	3Ah	*1	*3	*5	03h
Character		I	I	S	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	△	○	○

Notes:

- Parameter NWP is available only for PT-LB80NT\*\*/LB75NT\*\*.
- During STANDBY, this command is available only when "AUDIO IN STANDBY" is "ON".

## 2.7. MENU key

Hexadecimal	02h	4Fh	4Dh	4Eh	03h
Character		O	M	N	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	4Dh	4Eh	03h
Character		O	M	N	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	×

## 2.8. ENTER key

Hexadecimal	02h	4Fh	45h	4Eh	03h
Character		O	E	N	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	45h	4Eh	03h
Character		O	E	N	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	×

## 2.9. RETURN key

Hexadecimal	02h	4Fh	42h	4Bh	03h
Character		O	B	K	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	42h	4Bh	03h
Character		O	B	K	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	×

## 2.10. UP key

Hexadecimal	02h	4Fh	43h	55h	03h
Character		O	C	U	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	43h	55h	03h
Character		O	C	U	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	×

## 2.11. DOWN key

Hexadecimal	02h	4Fh	43h	44h	03h
Character		O	C	D	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	43h	44h	03h
Character		O	C	D	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	×

## 2.12. LEFT key

Hexadecimal	02h	4Fh	43h	4Ch	03h
Character		O	C	L	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	43h	4Ch	03h
Character		O	C	L	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	×

## 2.13. RIGHT key

Hexadecimal	02h	4Fh	43h	52h	03h
Character		O	C	R	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	43h	52h	03h
Character		O	C	R	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	×

## 2.14. DEFAULT key

Hexadecimal	02h	4Fh	53h	54h	03h
Character		O	S	T	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	53h	54h	03h
Character		O	S	T	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	×

## 2.15. FUNCTION key

Hexadecimal	02h	46h	43h	31h	03h
Character		F	C	I	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	46h	43h	31h	03h
Character		F	C	I	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	×

## 2.16. VOLUME + key

Hexadecimal	02h	41h	55h	55h	03h
Character		A	U	U	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	41h	55h	55h	03h
Character		A	U	U	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	△	×	×

Note:

- During STANDBY, this command is available only when "AUDIO IN STANDBY" is "ON".

## 2.17. VOLUME - key

Hexadecimal	02h	41h	55h	44h	03h
Character		A	U	D	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	41h	55h	44h	03h
Character		A	U	D	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	△	×	×

Note:

- During STANDBY, this command is available only when "AUDIO IN STANDBY" is "ON".

## 2.18. INDEX-WINDOW key

Hexadecimal	02h	4Fh	49h	58h	03h
Character		O	I	X	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	49h	58h	03h
Character		O	I	X	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

## 2.19. DIGITAL ZOOM + key

Hexadecimal	02h	44h	5Ah	55h	03h
Character		D	Z	U	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	44h	5Ah	55h	03h
Character		D	Z	U	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

## 2.20. DIGITAL ZOOM - key

Hexadecimal	02h	44h	5Ah	44h	03h
Character		D	Z	D	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	44h	5Ah	44h	03h
Character		D	Z	D	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

## 2.21. COMPUTER SEARCH key

Hexadecimal	02h	4Fh	50h	43h	03h
Character		O	P	C	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	50h	43h	03h
Character		O	P	C	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	○	×

Note:

- This command is available only for PT-LB80NT\*\*/LB75NT\*\*.

## 2.22. PAGE UP key

Hexadecimal	02h	4Fh	55h	50h	03h
Character		O	U	P	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	55h	50h	03h
Character		O	U	P	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is available only for PT-LB80NT\*\*/LB75NT\*\*.

## 2.23. PAGE DOWN key

Hexadecimal	02h	4Fh	44h	50h	03h
Character		O	D	P	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	44h	50h	03h
Character		O	D	P	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is available only for PT-LB80NT\*\*/LB75NT\*\*.

## 2.24. MULTI-LIVE key

Hexadecimal	02h	4Fh	4Dh	4Ch	03h
Character		O	M	L	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	4Dh	4Ch	03h
Character		O	M	L	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is available only for PT-LB80NT\*\*/LB75NT\*\*.

## 2.25. Picture Mode

Hexadecimal	02h	56h	50h	4Dh	3Ah	*1	*3	*5	03h
Character		V	P	M	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	DYNAMIC			NATURAL			STANDARD			BLACKBOARD		
Hexadecimal	44h	59h	4Eh	4Eh	41h	54h	53h	54h	44h	42h	42h	44h
Character	D	Y	N	N	A	T	S	T	D	B	B	D

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	50h	4Dh	3Ah	*1	*3	*5	03h
Character		V	P	M	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- Parameter BBD is available only when "Black Board" is "ON".

## 2.26. Contrast

Hexadecimal	02h	56h	43h	4Eh	3Ah	*1	*3	*5	03h
Character		V	C	N	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-32			-31			-30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	-	3	2	-	3	1	-	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	43h	4Eh	3Ah	*1	*3	*5	03h
Character		V	C	N	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

## 2.27. Brightness

Hexadecimal	02h	56h	42h	52h	3Ah	*1	*3	*5	03h
Character		V	B	R	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-32			-31			-30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	-	3	2	-	3	1	-	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	42h	52h	3Ah	*1	*3	*5	03h
Character		V	B	R	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

## 2.28. Color

Hexadecimal	02h	56h	43h	4Fh	3Ah	*1	*3	*5	03h
Character		V	C	O	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	- 32			- 31			- 30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	—	3	2	—	3	1	—	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	43h	4Fh	3Ah	*1	*3	*5	03h
Character		V	C	O	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is only acceptable when the input is VIDEO/S-VIDEO or COMPUTER1/COMPUTER2 and the input signal is YPbPr. In other cases, ER401 is returned.

## 2.29. Tint

Hexadecimal	02h	56h	54h	4Eh	3Ah	*1	*3	*5	03h
Character		V	T	N	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	- 32			- 31			- 30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	—	3	2	—	3	1	—	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	54h	4Eh	3Ah	*1	*3	*5	03h
Character		V	T	N	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is only acceptable when the input is VIDEO/S-VIDEO or COMPUTER1/COMPUTER2 and the input signal is YPBPR. In other cases, ER401 is returned.

## 2.30. Sharpness

Hexadecimal	02h	56h	53h	52h	3Ah	*1	*3	*5	03h
Character		V	S	R	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h
Character	0	0	0	0	0	1	0	0	2
	13			14			15		
Hexadecimal	30h	31h	33h	30h	31h	34h	30h	31h	35h
Character	0	1	3	0	1	4	0	1	5

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	53h	52h	3Ah	*1	*3	*5	03h
Character		V	S	R	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

### 2.31. Color Temperature

Hexadecimal	02h	4Fh	54h	45h	3Ah	*1	03h
Character		O	T	E	:	*2	

Parameters (\*1, \*2)

	LOW		STANDARD		HIGH	
Hexadecimal	30h		31h		32h	
Character	0		1		2	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	54h	45h	3Ah	*1	03h
Character		O	T	E	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

### 2.32. W-Bal. R

Hexadecimal	02h	56h	57h	52h	3Ah	*1	*3	*5	03h
Character		V	W	R	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-32			-31			-30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	—	3	2	—	3	1	—	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	57h	52h	3Ah	*1	*3	*5	03h
Character		V	W	R	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is acceptable only when the input is COMPUTER1 or COMPUTER2. In other cases, ER401 is returned.

### 2.33. W-Bal. G

Hexadecimal	02h	56h	57h	47h	3Ah	*1	*3	*5	03h
Character		V	W	G	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-32			-31			-30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	—	3	2	—	3	1	—	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	57h	47h	3Ah	*1	*3	*5	03h
Character		V	W	G	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is acceptable only when the input is COMPUTER1 or COMPUTER2. In other cases, ER401 is returned.



## 2.34. W-Bal. B

Hexadecimal	02h	56h	57h	42h	3Ah	*1	*3	*5	03h
Character		V	W	B	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	- 32			- 31			- 30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	—	3	2	—	3	1	—	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	57h	42h	3Ah	*1	*3	*5	03h
Character		V	W	B	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is acceptable only when the input is COMPUTER1 or COMPUTER2. In other cases, ER401 is returned.

## 2.35. Daylight View

Hexadecimal	02h	56h	58h	58h	3Ah	44h	4Ch	56h	49h
Character		V	X	X	:	D	L	V	I
Hexadecimal	30h	3Dh	2Dh	*1	*3	*5	*7	*9	03h
Character	0	=	+	*2	*4	*6	*8	*10	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8, \*9, \*10)

FRONT Installation

	OFF				
Hexadecimal	30h	30h	30h	30h	30h
Character	0	0	0	0	0
	AUTO				
Hexadecimal	30h	30h	30h	30h	31h
Character	0	0	0	0	1
	ON				
Hexadecimal	30h	30h	30h	30h	32h
Character	0	0	0	0	2

REAR Installation

	OFF				
Hexadecimal	30h	30h	30h	30h	30h
Character	0	0	0	0	0
	ON				
Hexadecimal	30h	30h	30h	30h	31h
Character	0	0	0	0	1

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	58h	58h	3Ah	44h	4Ch	56h	49h
Character		V	X	X	:	D	L	V	I
Hexadecimal	30h	3Dh	2Dh	*1	*3	*5	*7	*9	03h
Character	0	=	+	*2	*4	*6	*8	*10	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

### 2.36. TV-System

Hexadecimal	02h	56h	53h	47h	3Ah	*1	*3	*5	03h
Character		V	S	G	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	AUTO			NTSC			NTSC4.43			PAL		
Hexadecimal	41h	55h	54h	4Eh	54h	53h	4Eh	34h	34h	50h	41h	4Ch
Character	A	U	T	N	T	S	N	4	4	P	A	L
	PAL-M			PAL-N			SECAM					
Hexadecimal	50h	41h	4Dh	50h	41h	4Eh	53h	45h	43h			
Character	P	A	M	P	A	N	S	E	C			

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	53h	47h	3Ah	*1	*3	*5	03h
Character		V	S	G	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	○	×

Note:

- This command is acceptable only when the input is VIDEO or S-VIDEO. In other cases, ER401 is returned.

### 2.37. Still Mode

Hexadecimal	02h	56h	53h	4Dh	3Ah	*1	03h
Character		V	S	M	:	*2	

Parameters (\*1, \*2)

	OFF			ON		
Hexadecimal	30h			31h		
Character	0			1		

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	53h	4Dh	3Ah	*1	03h
Character		V	S	M	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is acceptable only when the input is VIDEO or S-VIDEO. In other cases, ER401 is returned.

### 2.38. Noise Reduction

Hexadecimal	02h	56h	4Eh	52h	3Ah	*1	03h
Character		V	N	R	:	*2	

Parameters (\*1, \*2)

	OFF			ON		
Hexadecimal	30h			31h		
Character	0			1		

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	4Eh	52h	3Ah	*1	03h
Character		V	N	R	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is acceptable only when the input is VIDEO or S-VIDEO. In other cases, ER401 is returned.

### 2.39. Keystone

Hexadecimal	02h	4Fh	4Bh	53h	3Ah	*1	*3	*5	03h
Character		O	K	S	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-32			-31			-30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	—	3	2	—	3	1	—	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	4Bh	53h	3Ah	*1	*3	*5	03h
Character		O	K	S	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	×

### 2.40. Realtime Keystone

Hexadecimal	02h	4Fh	41h	4Bh	3Ah	*1	03h
Character		O	A	K	:	*2	

Parameters (\*1, \*2)

	ON	OFF
Hexadecimal	31h	30h
Character	1	0

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	41h	4Bh	3Ah	*1	03h
Character		O	A	K	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	×

### 2.41. Horizontal Position

Hexadecimal	02h	56h	48h	50h	3Ah	*1	*3	*5	*7	03h
Character		V	H	P	:	*2	*4	*6	*8	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	-127				-126			
Hexadecimal	2Dh	33h	32h	37h	2Dh	33h	32h	36h
Character	—	1	2	7	—	1	2	6
	126				127			
Hexadecimal	30h	33h	32h	36h	30h	33h	32h	37h
Character	0	1	2	6	0	1	2	7

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	48h	50h	3Ah	*1	*3	*5	*7	03h
Character		V	H	P	:	*2	*4	*6	*8	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

### 2.42. Vertical Position

Hexadecimal	02h	56h	56h	50h	3Ah	*1	*3	*5	03h
Character		V	V	P	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-64			-63			-62		
Hexadecimal	2Dh	36h	34h	2Dh	36h	33h	2Dh	36h	32h
Character	—	6	4	—	6	3	—	6	2
	62			63			64		
Hexadecimal	30h	36h	32h	30h	36h	33h	30h	36h	34h
Character	0	6	2	0	6	3	0	6	4

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	56h	50h	3Ah	*1	*3	*5	03h
Character		V	V	P	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

## 2.43. Dot Clock

Hexadecimal	02h	56h	44h	43h	3Ah	*1	*3	*5	03h
Character		V	D	C	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	- 32			- 31			- 30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	—	3	2	—	3	1	—	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	44h	43h	3Ah	*1	*3	*5	03h
Character		V	D	C	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is acceptable only when the input is COMPUTER1 or COMPUTER2. In other cases, ER401 is returned.

## 2.44. Clock Phase

Hexadecimal	02h	56h	43h	50h	3Ah	*1	*3	*5	03h
Character		V	C	P	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	- 16			- 15			- 14		
Hexadecimal	2Dh	31h	36h	2Dh	31h	35h	2Dh	31h	34h
Character	—	1	6	—	1	5	—	1	4
	14			15			16		
Hexadecimal	30h	31h	34h	30h	31h	35h	30h	31h	36h
Character	0	1	4	0	1	5	0	1	6

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	43h	50h	3Ah	*1	*3	*5	03h
Character		V	C	P	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is acceptable only when the input is COMPUTER1 or COMPUTER2. In other cases, ER401 is returned.

## 2.45. Aspect Ratio

Hexadecimal	02h	56h	53h	31h	3Ah	*1	03h
Character		V	S	1	:	*2	

Parameters (\*1, \*2)

When the input is VIDEO or COMPUTER

	4:3		16:9		S4:3		THROUGH
Hexadecimal	31h		32h		33h		34h
Character	1		2		3		4

When the input is S-VIDEO

	AUTO		4:3		16:9		S4:3	THROUGH
Hexadecimal	30h		31h		32h		33h	34h
Character	0		1		2		3	4

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	53h	31h	3Ah	*1	03h
Character		V	S	1	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

## 2.46. Frame Lock

Hexadecimal	02h	56h	46h	4Ch	3Ah	*1	03h
Character		V	F	L	:	*2	

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	46h	4Ch	3Ah	*1	03h
Character		V	F	L	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is only acceptable when the input is COMPUTER1 or COMPUTER2 and the input signal is RGB signal (60 Hz signals) that can lock frame. In other cases, ER401 is returned.

## 2.47. Input Guide

Hexadecimal	02h	4Fh	49h	44h	3Ah	*1	03h
Character		O	I	D	:	*2	

Parameters (\*1, \*2)

	OFF	SIMPLE	DETAILED
Hexadecimal	30h	31h	32h
Character	0	1	2

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	49h	44h	3Ah	*1	03h
Character		O	I	D	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	○

## 2.48. OSD Design

Hexadecimal	02h	4Dh	4Fh	44h	3Ah	*1	03h
Character		M	O	D	:	*2	

Parameters (\*1, \*2)

	TYPE1	TYPE2	TYPE3
Hexadecimal	30h	31h	32h
Character	0	1	2

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Dh	4Fh	44h	3Ah	*1	03h
Character		M	O	D	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	○

## 2.49. Computer2 Select

Hexadecimal	02h	4Fh	52h	49h	3Ah	*1	*3	*5	03h
Character		O	R	I	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	INPUT			OUTPUT		
Hexadecimal	32h	49h	4Eh	32h	4Fh	55h
Character	2	I	N	2	O	U

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	52h	49h	3Ah	*1	*3	*5	03h
Character		O	R	I	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	○	○

Note:

- When the COMPUTER2 input has been selected, it is not possible to use it.

## 2.50. Control Panel

Hexadecimal	02h	43h	50h	4Bh	3Ah	*1	03h
Character		C	P	K	:	*2	

Parameters (\*1, \*2)

	VALID	INVALID
Hexadecimal	30h	31h
Character	0	1

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	43h	50h	4Bh	3Ah	*1	03h
Character		C	P	K	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	×	○

## 2.51. Power Off Timer

Hexadecimal	02h	4Fh	41h	46h	3Ah	*1	*3	03h
Character		O	A	F	:	*2	*4	

Parameters (\*1, \*2, \*3, \*4)

	OFF		15		60		
Hexadecimal	30h	30h	31h	35h	36h	30h	
Character	0	0	1	5	6	0	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	41h	46h	3Ah	*1	*3	03h
Character		O	A	F	:	*2	*4	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	○

## 2.52. Direct Power On

Hexadecimal	02h	4Fh	50h	59h	3Ah	*1	03h
Character		O	P	Y	:	*2	

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	50h	59h	3Ah	*1	03h
Character		C	P	Y	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	○	○

## 2.53. Auto Setup

Hexadecimal	02h	4Fh	53h	53h	3Ah	*1	03h
Character		O	S	S	:	*2	

Parameters (\*1, \*2)

	BUTTON	AUTO
Hexadecimal	30h	31h
Character	0	1

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	53h	53h	3Ah	*1	03h
Character		O	S	S	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	○

## 2.54. Signal Search

Hexadecimal	02h	4Fh	53h	52h	3Ah	*1	03h
Character		O	S	R	:	*2	

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	53h	52h	3Ah	*1	03h
Character		O	S	R	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	○

## 2.55. Language

Hexadecimal	02h	4Fh	4Ch	47h	3Ah	*1	*3	*5	03h
Character		O	L	G	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6,)

	English			German			French		
Hexadecimal	45h	4Eh	47h	44h	45h	55h	46h	52h	41h
Character	E	N	G	D	E	U	F	R	A
	Spanish			Italian			Japanese		
Hexadecimal	45h	53h	50h	49h	54h	4Ch	4Ah	50h	4Eh
Character	E	S	P	I	T	L	J	P	N
	Chinese			Russian			Korean		
Hexadecimal	43h	48h	49h	52h	55h	53h	4Bh	4Fh	52h
Character	C	H	I	R	U	S	K	O	R
	Portuguese			Swedish			Norwegian		
Hexadecimal	50h	4Fh	52h	53h	56h	45h	4Eh	4Fh	52h
Character	P	O	R	S	V	E	N	O	R
	Danish			Polish			Czech		
Hexadecimal	44h	41h	4Eh	50h	4Fh	4Ch	43h	45h	53h
Character	D	A	N	P	O	L	C	E	S
	Hungarian			Thai					
Hexadecimal	4Dh	41h	47h	54h	48h	41h			
Character	M	A	G	T	H	A			

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	4Ch	47h	3Ah	*1	*3	*5	03h
Character		O	L	G	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	○

## 2.56. Installation

Hexadecimal	02h	4Fh	49h	4Ch	3Ah	*1	03h
Character		O	I	L	:	*2	

Parameters (\*1, \*2)

	FRONT/DESK		REAR/DESK		FRONT / CEILING		REAR/CEILING	
Hexadecimal	30h		31h		32h		33h	
Character	0		1		2		3	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	49h	4Ch	3Ah	*1	03h
Character		O	I	L	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	×

## 2.57. RGB/YPbPr

Hexadecimal	02h	4Fh	52h	46h	3Ah	*1	03h
Character		O	R	F	:	*2	

Parameters (\*1, \*2)

	RGB	YPbPr	AUTO
Hexadecimal	30h	31h	32h
Character	0	1	2

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	52h	46h	3Ah	*1	03h
Character		O	R	F	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	×

Note:

- This command is only acceptable when the input is COMPUTER1 or COMPUTER2 and the input signal can be switched to RGB and YPbPr. In other cases, ER401 is returned.

## 2.58. Function

Hexadecimal	02h	4Fh	46h	43h	3Ah	*1	03h
Character		O	F	C	:	*2	

Parameters (\*1, \*2)

	AV MUTE	FREEZE	AUTO SETUP	
Hexadecimal	30h	31h	32h	
Character	0	1	2	
	INDEX-WINDOW	ASPECT	PICTURE MODE	CLOSED CAPTION
Hexadecimal	33h	34h	35h	36h
Character	3	4	5	6

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	46h	43h	3Ah	*1	03h
Character		O	F	C	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	○

Note:

- Parameter CLOSED CAPTION is available only for PT-LB80NTU/LB80U/LB75NTU/LB75U. In other models, ER402 is returned.

## 2.59. Altitude

Hexadecimal	02h	4Fh	46h	4Dh	3Ah	*1	03h
Character		O	F	M	:	*2	

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	46h	4Dh	3Ah	*1	03h
Character		O	F	M	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	○



## 2.60. Lamp Power

Hexadecimal	02h	4Fh	4Ch	50h	3Ah	*1	03h
Character		O	L	P	:	*2	

Parameters (\*1, \*2)

	ECO-MODE	STANDARD
Hexadecimal	30h	31h
Character	0	1

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	4Ch	50h	3Ah	*1	03h
Character		O	L	P	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	○

## 2.61. Closed Caption

Hexadecimal	02h	4Fh	43h	43h	3Ah	*1	03h
Character		O	C	C	:	*2	

Parameters (\*1, \*2)

	OFF	CC1	CC2	CC3	CC4
Hexadecimal	30h	31h	32h	33h	34h
Character	0	1	2	3	4

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	43h	43h	3Ah	*1	03h
Character		O	C	C	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is acceptable only for PT-LB80NTU/LB80U/LB75NTU/LB75U. In other models, ER401 is returned.

## 2.62. Audio Volume

Hexadecimal	02h	41h	56h	4Ch	3Ah	*1	*3	*5	03h
Character		A	V	L	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h
Character	0	0	0	0	0	1	0	0	2
	61			62			63		
Hexadecimal	30h	36h	31h	30h	36h	32h	30h	36h	33h
Character	0	6	1	0	6	2	0	6	3

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	41h	56h	4Ch	3Ah	*1	*3	*5	03h
Character		A	V	L	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	△	×	×

Note:

- During STANDBY, this command is available only when "AUDIO IN STANDBY" is "ON".

## 2.63. Audio Balance

Hexadecimal	02h	41h	42h	4Ch	3Ah	*1	*3	*5	03h
Character		A	B	L	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-16			-15			-14		
Hexadecimal	2Dh	31h	36h	2Dh	31h	35h	2Dh	31h	34h
Character	—	1	6	—	1	5	—	1	4
	14			15			16		
Hexadecimal	30h	31h	34h	30h	31h	35h	30h	31h	36h
Character	0	1	4	0	1	5	0	1	6

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	41h	42h	4Ch	3Ah	*1	*3	*5	03h
Character		A	B	L	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	△	×	×

Note:

- During STANDBY, this command is available only when "AUDIO IN STANDBY" is "ON".

## 2.64. SXGA Mode

Hexadecimal	02h	4Fh	53h	58h	3Ah	*1	03h
Character		O	S	X	:	*2	

Parameters (\*1, \*2)

	SXGA	SXGA+
Hexadecimal	30h	31h
Character	0	1

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	53h	58h	3Ah	*1	03h
Character		O	S	X	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is only acceptable when the input is COMPUTER1 or COMPUTER2 and the input signal is SXGA. In other cases, ER401 is returned.

## 2.65. Wide Mode

Hexadecimal	02h	4Fh	58h	47h	3Ah	*1	03h
Character		O	X	G	:	*2	

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	58h	47h	3Ah	*1	03h
Character		O	X	G	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is only acceptable when the input is COMPUTER1 or COMPUTER2 and the input signal is XGA. In other cases, ER401 is returned.

## 2.66. Black Board

Hexadecimal	02h	4Fh	42h	42h	3Ah	*1	03h
Character		O	B	B	:	*2	

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	42h	42h	3Ah	*1	03h
Character		O	B	B	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	×	×

## 2.67. Back Color

Hexadecimal	02h	4Fh	42h	43h	3Ah	*1	03h
Character		O	B	C	:	*2	

Parameters (\*1, \*2)

	BLUE	BLACK
Hexadecimal	30h	31h
Character	0	1

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	42h	43h	3Ah	*1	03h
Character		O	B	C	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	×

## 2.68. Startup Logo

Hexadecimal	02h	4Dh	4Ch	4Fh	3Ah	*1	03h
Character		M	L	O	:	*2	

Parameters (\*1, \*2)

	OFF	ON	USER
Hexadecimal	30h	31h	32h
Character	0	1	2

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Dh	4Ch	4Fh	3Ah	*1	03h
Character		M	L	O	:	*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	○	○	○

## 2.69. Wireless LAN Select

Hexadecimal	02h	4Fh	4Eh	53h	3Ah	*1	*3	*5	03h
Character		O	N	S	:	*2	*4	*6	

Parameters (\*1, \*2, \*3, \*4, \*5, \*6,)

	1			2			3		
Hexadecimal	30h	30h	31h	30h	30h	32h	30h	30h	33h
Character	0	0	1	0	0	2	0	0	3
	4			USER1			USER2		
Hexadecimal	30h	30h	34h	30h	30h	35h	30h	30h	36h
Character	0	0	4	0	0	5	0	0	6
	USER3			WSSS			DISABLE		
Hexadecimal	30h	30h	30h	30h	30h	38h	30h	30h	30h
Character	0	0	0	0	0	8	0	0	0

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	4Eh	53h	3Ah	*1	*3	*5	03h
Character		O	N	S	:	*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
×	×	×	×

Note:

- This command is available only for PT-LB80NT\*\*/LB75NT\*\*.

## 2.70. Query Power

Hexadecimal	02h	51h	50h	57h	03h
Character		Q	P	W	

Response (Callback)

OFF

Hexadecimal	02h	30h	30h	31h	03h
Character		0	0	0	

ON

Hexadecimal	02h	30h	30h	31h	03h
Character		0	0	1	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 2.71. Query Lamp Status

Hexadecimal	02h	51h	24h	53h	03h
Character		Q	\$	S	

Response (Callback)

Lamp OFF

Hexadecimal	02h	30h	03h
Character		0	

In turning ON

Hexadecimal	02h	31h	03h
Character		1	

Lamp ON

Hexadecimal	02h	32h	03h
Character		2	

In turning OFF

Hexadecimal	02h	33h	03h
Character		3	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 2.72. Query Input Select

Hexadecimal	02h	51h	49h	4Eh	03h
Character		Q	I	N	

Response (Callback)

COMPUTER1

Hexadecimal	02h	52h	47h	31h	03h
Character		R	G	1	

COMPUTER2

Hexadecimal	02h	52h	47h	32h	03h
Character		R	G	2	

VIDEO

Hexadecimal	02h	56h	49h	44h	03h
Character		V	I	D	

S-VIDEO

Hexadecimal	02h	53h	56h	44h	03h
Character		S	V	D	

NETWORK

Hexadecimal	02h	4Eh	57h	50h	03h
Character		N	W	P	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	×	<input type="radio"/>	<input type="radio"/>

### 2.73. Query FREEZE

Hexadecimal	02h	51h	46h	5Ah	03h
Character		Q	F	Z	

Response (Callback)

OFF

Hexadecimal	02h	30h	03h
Character		0	

ON

Hexadecimal	02h	31h	03h
Character		1	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	○

### 2.74. Query Index-Window

Hexadecimal	02h	51h	49h	58h	03h
Character		Q	I	X	

Response (Callback)

OFF

Hexadecimal	02h	30h	03h
Character		0	

50%

Hexadecimal	02h	31h	03h
Character		1	

75%

Hexadecimal	02h	32h	03h
Character		2	

100%

Hexadecimal	02h	33h	03h
Character		3	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	○

### 2.75. Query Auto Setup Status

Hexadecimal	02h	51h	41h	53h	03h
Character		Q	A	S	

Response (Callback)

OFF

Hexadecimal	02h	30h	03h
Character		0	

In execution

Hexadecimal	02h	31h	03h
Character		1	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	○	○	○

### 2.76. Query Audio Volume Level

Hexadecimal	02h	51h	41h	56h	03h
Character		Q	A	V	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	△	○	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h
Character	0	0	0	0	0	1	0	0	2
	61			62			63		
Hexadecimal	30h	36h	31h	30h	36h	32h	30h	36h	33h
Character	0	6	1	0	6	2	0	6	3

Note:

- During STANDBY, this command is available only when "AUDIO IN STANDBY" is "ON".

## 2.77. Query Audio Balance

Hexadecimal	02h	51h	42h	4Ch	03h
Character		Q	B	L	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	△	○	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-16			-15			-14		
Hexadecimal	2Dh	31h	36h	2Dh	31h	35h	2Dh	31h	34h
Character	—	1	6	—	1	5	—	1	4
	14			15			16		
Hexadecimal	30h	36h	31h	30h	31h	35h	30h	31h	36h
Character	0	1	4	0	1	5	0	1	6

Note:

- During STANDBY, this command is available only when "AUDIO IN STANDBY" is "ON".

## 2.78. Query Picture Mode

Hexadecimal	02h	51h	50h	4Dh	03h
Character		Q	P	M	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	DYNAMIC			NATURAL			STANDARD			BLACKBOARD		
Hexadecimal	44h	59h	4Eh	4Eh	41h	54h	53h	54h	44h	42h	42h	44h
Character	D	Y	N	N	A	T	S	T	D	B	B	D

## 2.79. Query Color

Hexadecimal	02h	51h	56h	43h	03h
Character		Q	V	C	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-32			-31			-30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	—	3	2	—	3	1	—	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

## 2.80. Query Tint

Hexadecimal	02h	51h	56h	54h	03h
Character		Q	V	T	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-32			-31			-30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	—	3	2	—	3	1	—	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

## 2.81. Query Brightness

Hexadecimal	02h	51h	56h	42h	03h
Character		Q	V	B	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-32			-31			-30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	—	3	2	—	3	1	—	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

## 2.82. Query Contrast

Hexadecimal	02h	51h	56h	52h	03h
Character		Q	V	R	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-32			-31			-30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	—	3	2	—	3	1	—	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

### 2.83. Query Color Temperature

Hexadecimal	02h	51h	54h	45h	03h
Character		Q	T	E	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2)

	LOW	STANDARD	HIGH
Hexadecimal	30h	31h	32h
Character	0	1	2

### 2.84. Query Sharpness

Hexadecimal	02h	51h	56h	53h	03h
Character		Q	V	S	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-08			-07			-06		
Hexadecimal	2Dh	30h	38h	2Dh	30h	37h	2Dh	30h	36h
Character	—	0	8	—	0	7	—	0	6
	13			14			015		
Hexadecimal	30h	31h	33h	30h	31h	34h	30h	31h	35h
Character	0	1	3	0	1	4	0	1	5

### 2.85. Query White Balance - R

Hexadecimal	02h	51h	57h	52h	03h
Character		Q	W	R	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-32			-31			-30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	—	3	2	—	3	1	—	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

### 2.86. Query White Balance - G

Hexadecimal	02h	51h	57h	47h	03h
Character		Q	W	G	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-32			-31			-30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	—	3	2	—	3	1	—	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2



## 2.87. Query White Balance - B

Hexadecimal	02h	51h	57h	42h	03h
Character		Q	W	B	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-32			-31			-30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	—	3	2	—	3	1	—	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

## 2.88. Query Daylight View

Hexadecimal	02h	51h	56h	58h	3Ah	44h	4Ch	56h	49h	30h
Character		Q	V	X	:	D	L	V	I	0

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	44h	4Ch	56h	49h	30h	3Dh	2Dh
Character		D	L	V	I	0	=	+
Hexadecimal	*1	*3	*5	*7	*9	03h		
Character	*2	*4	*6	*8	*10			

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8, \*9, \*10)

FRONT Installation

	OFF				
Hexadecimal	30h	30h	30h	30h	30h
Character	0	0	0	0	0
	AUTO				
Hexadecimal	30h	30h	30h	30h	31h
Character	0	0	0	0	1
	ON				
Hexadecimal	30h	30h	30h	30h	32h
Character	0	0	0	0	2

REAR Installation

	OFF				
Hexadecimal	30h	30h	30h	30h	30h
Character	0	0	0	0	0
	ON				
Hexadecimal	30h	30h	30h	30h	31h
Character	0	0	0	0	1

## 2.89. Query TV-System

Hexadecimal	02h	51h	53h	47h	03h
Character		Q	S	G	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	AUTO			NTSC			NTSC4.43			PAL		
Hexadecimal	41h	55h	54h	4Eh	54h	53h	4Eh	34h	34h	50h	41h	4Ch
Character	A	U	T	N	T	S	N	4	4	P	A	L
	PAL-M			PAL-N			SECAM					
Hexadecimal	50h	41h	4Dh	50h	41h	4Eh	53h	45h	43h			
Character	P	A	M	P	A	N	S	E	C			

Note:

- This command is acceptable only when the input is VIDEO or S-VIDEO. In other cases, ER401 is returned.

## 2.90. Query Still mode

Hexadecimal	02h	51h	53h	54h	03h
Character		Q	S	T	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

Note:

- This command is acceptable only when the input is VIDEO or S-VIDEO. In other cases, ER401 is returned.

## 2.91. Query Realtime Keystone

Hexadecimal	02h	51h	41h	4Bh	03h
Character		Q	A	K	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

## 2.92. Query Keystone

Hexadecimal	02h	51h	4Bh	53h	03h
Character		Q	K	S	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	○	○	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-32			-31			-30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	-	3	2	-	3	1	-	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

## 2.93. Query Horizontal Position

Hexadecimal	02h	51h	48h	50h	03h
Character		Q	H	P	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-127				-126				-125			
Hexadecimal	2Dh	31h	32h	37h	2Dh	31h	32h	36h	2Dh	31h	32h	35h
Character	-	1	2	7	-	1	2	6	-	1	2	5
	125				126				127			
Hexadecimal	31h	32h	35h	31h	32h	36h	31h	32h	37h			
Character	1	2	5	1	2	6	1	2	7			

## 2.94. Query Vertical Position

Hexadecimal	02h	51h	56h	50h	03h
Character		Q	V	P	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-64			-63			-62		
Hexadecimal	2Dh	36h	34h	2Dh	36h	33h	2Dh	36h	32h
Character	-	6	4	-	6	3	-	6	2
	62			63			64		
Hexadecimal	36h	32h	36h	33h	36h	34h			
Character	6	2	6	3	6	4			

## 2.95. Query Clock Phase

Hexadecimal	02h	51h	43h	50h	03h
Character		Q	C	P	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-16			-15			-14		
Hexadecimal	2Dh	31h	36h	2Dh	31h	36h	2Dh	31h	36h
Character	-	1	6	-	1	6	-	1	4
	14			15			16		
Hexadecimal	30h	31h	34h	30h	31h	35h	30h	31h	36h
Character	0	1	4	0	1	5	0	1	6

Note:

- This command is acceptable only when the input is COMPUTER1 or COMPUTER2. In other cases, ER401 is returned.

## 2.96. Query Dot Clock

Hexadecimal	02h	51h	44h	43h	03h
Character		Q	D	C	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-32			-31			-30		
Hexadecimal	2Dh	33h	32h	2Dh	33h	31h	2Dh	33h	30h
Character	-	3	2	-	3	1	-	3	0
	30			31			32		
Hexadecimal	30h	33h	30h	30h	33h	31h	30h	33h	32h
Character	0	3	0	0	3	1	0	3	2

Note:

- This command is acceptable only when the input is COMPUTER1 or COMPUTER2. In other cases, ER401 is returned.

## 2.97. Query Frame Lock

Hexadecimal	02h	51h	46h	4Ch	03h
Character		Q	F	L	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

## 2.98. Query Input Guide

Hexadecimal	02h	51h	44h	49h	03h
Character		Q	D	I	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Parameters (\*1, \*2)

	OFF	SIMPLE	DETAILED
Hexadecimal	30h	31h	32h
Character	0	1	2

## 2.99. Query OSD Design

Hexadecimal	02h	51h	4Fh	44h	03h
Character		Q	O	D	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Parameters (\*1, \*2)

	TYPE1	TYPE2	TYPE3
Hexadecimal	30h	31h	32h
Character	0	1	2

## 2.100. Query ASPECT Ratio

Hexadecimal	02h	51h	53h	31h	03h
Character		Q	S	I	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Parameters (\*1, \*2)

When the input is VIDEO or COMPUTER

	4:3	16:9	S4:3
Hexadecimal	31h	32h	33h
Character	1	2	3

When the input is S-VIDEO

	AUTO	4:3	16:9	S4:3
Hexadecimal	30h	31h	32h	33h
Character	0	1	2	3

### 2.101. Query AV Mute

Hexadecimal	02h	51h	53h	48h	03h
Character		Q	S	H	

Response (Callback)

OFF

Hexadecimal	02h	30h	03h
Character		0	

ON

Hexadecimal	02h	31h	03h
Character		1	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	○

### 2.102. Query Auto Setup

Hexadecimal	02h	51h	53h	53h	03h
Character		Q	S	S	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	○

Parameters (\*1, \*2)

	BUTTON	AUTO
Hexadecimal	30h	31h
Character	0	1

### 2.103. Query Signal Search

Hexadecimal	02h	51h	53h	52h	03h
Character		Q	S	R	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	○

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

### 2.104. Query RGB/YPbPr

Hexadecimal	02h	51h	52h	46h	03h
Character		Q	R	F	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	○

Parameters (\*1, \*2)

	RGB	YPbPr	AUTO
Hexadecimal	30h	31h	32h
Character	0	1	2

## 2.105. Query Lamp Power

Hexadecimal	02h	51h	4Ch	50h	03h
Character		Q	L	P	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Parameters (\*1, \*2)

	ECO-MODE	STANDARD
Hexadecimal	30h	31h
Character	0	1

## 2.106. Query Display Language

Hexadecimal	02h	51h	4Ch	47h	03h
Character		Q	L	G	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	English			German			French		
Hexadecimal	45h	4Eh	47h	44h	45h	55h	46h	52h	41h
Character	E	N	G	D	E	U	F	R	A
	Spanish			Italian			Japanese		
Hexadecimal	45h	53h	50h	49h	54h	4Ch	4Ah	50h	4Eh
Character	E	S	P	I	T	L	J	P	N
	Chinese			Russian			Korean		
Hexadecimal	43h	48h	49h	52h	55h	53h	4Bh	4Fh	52h
Character	C	H	I	R	U	S	K	O	R
	Portuguese			Swedish			Norwegian		
Hexadecimal	50h	4Fh	52h	53h	56h	45h	4Eh	4Fh	52h
Character	P	O	R	S	V	E	N	O	R
	Danish			Polish			Czech		
Hexadecimal	44h	41h	4Eh	50h	4Fh	4Ch	43h	45h	53h
Character	D	A	N	P	O	L	C	E	S
	Hungarian			Thai					
Hexadecimal	4Dh	41h	47h	54h	48h	41h			
Character	M	A	G	T	H	A			

## 2.107. Query Computer2 Select

Hexadecimal	02h	51h	52h	49h	03h
Character		Q	R	I	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	INPUT			OUTPUT		
Hexadecimal	32h	49h	4Eh	32h	4Fh	55h
Character	2	I	N	2	O	U

## 2.108. Query SXGA Mode

Hexadecimal	02h	51h	53h	58h	03h
Character		Q	S	X	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2)

	SXGA	SXGA+
Hexadecimal	30h	31h
Character	0	1

## 2.109. Query Wide Mode

Hexadecimal	02h	51h	58h	47h	03h
Character		Q	X	G	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

## 2.110. Query Noise Reduction

Hexadecimal	02h	51h	4Eh	52h	03h
Character		Q	N	R	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

Note:

- This command is acceptable only when the input is VIDEO or S-VIDEO. In other cases, ER401 is returned.

## 2.111. Query Black Board

Hexadecimal	02h	51h	42h	42h	03h
Character		Q	B	B	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	○	○

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

### 2.112. Query Back Color

Hexadecimal	02h	51h	42h	43h	03h
Character		Q	B	C	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Parameters (\*1, \*2)

	BLUE	BLACK
Hexadecimal	30h	31h
Character	0	1

### 2.113. Query Installation

Hexadecimal	02h	51h	53h	50h	03h
Character		Q	S	P	

Response (Callback)

FRONT/DESK

Hexadecimal	02h	30h	03h
Character		0	

REAR/DESK

Hexadecimal	02h	31h	03h
Character		1	

FRONT/CEILING

Hexadecimal	02h	32h	03h
Character		2	

REAR/CEILING

Hexadecimal	02h	33h	03h
Character		3	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### 2.114. Query Altitude

Hexadecimal	02h	51h	46h	4Dh	03h
Character		Q	F	M	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

### 2.115. Query Startup Logo

Hexadecimal	02h	51h	4Ch	4Fh	03h
Character		Q	L	O	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Parameters (\*1, \*2)

	OFF	ON	USER
Hexadecimal	30h	31h	32h
Character	0	1	2



## 2.116. Query Lamp Runtime

Hexadecimal	02h	51h	24h	4Ch	03h
Character		Q	\$	L	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	*7	03h
Character		*2	*4	*6	*8	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0 h				1 h			
Hexadecimal	30h	30h	30h	30h	30h	30h	30h	31h
Character	0	0	0	0	0	0	0	1
	9998 h				9999 h			
Hexadecimal	39h	39h	39h	38h	39h	39h	39h	39h
Character	9	9	9	8	9	9	9	9

Note:

- If the lamp runtime cannot be accessed, 0000 is returned.

## 2.117. Query Control Panel

Hexadecimal	02h	51h	50h	4Bh	03h
Character		Q	P	K	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Parameters (\*1, \*2)

	VALID	INVALID
Hexadecimal	30h	31h
Character	0	1

## 2.118. Query Power Off Timer

Hexadecimal	02h	51h	41h	46h	03h
Character		Q	A	F	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	03h
Character		*2	*4	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Parameters (\*1, \*2, \*3, \*4)

	OFF		15		60	
Hexadecimal	30h	30h	31h	35h	36h	30h
Character	0	0	1	5	6	0

## 2.119. Query Direct Power On

Hexadecimal	02h	51h	50h	59h	03h
Character		Q	P	Y	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

2.120. Query Closed Caption

Hexadecimal	02h	51h	43h	43h	03h
Character		Q	C	C	

Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STANDBY	NO SIGNAL	AV MUTE
○	×	×	○

Parameters (\*1, \*2)

	OFF	CC1	CC2	CC3	CC4
Hexadecimal	30h	31h	32h	33h	34h
Character	0	1	2	3	4

Note:

- This command is acceptable only for PT-LB80NTU/LB80U/LB75NTU/LB75U.